Accenture

Company Division/Team: Talent Innovation Lab

Company Website: www.accenture.com

Company Challenge:
How might we crowdsource business priorities to positively impact employee engagement?

Domain: Social Media, HR Analytics & Techology

Learning Objectives:
Students will learn about the future of HR Analytics & Technology by developing a solution to help Accenture leadership better understand the priorities of all 380,000 employees globally. Technologically, students will be challenged to develop both an intuitive front end tool/platform, and also a robust back-end framework that can provide the necessary reporting to summarize trends and guide leadership in its business decisions. This tool will capture insights on a continued basis, demonstrating to all employees that their feedback is being heard and is actionable. From the business perspective, the project team will better understand the process of objective prioritization and the importance of proactive leadership to improve employee experience, retention, and acquisition.

Company Champion: Tony Eaton
Champion Title: Head of Product & Experience Design
IP Ownership: Company-Owned

CM:
HT:
ORIE: X

Addepar

Company Division/Team: Engineering

Company Website: addepar.com

Company Challenge:
How might we use artificial intelligence to improve internal security at enterprise software companies?

Domain: FinTech, Security

Learning Objectives:
Students will learn and utilize technologies within the field of artificial intelligence and explore how applications of these technologies can improve the internal operational processes of enterprise software companies who deal with sensitive data.

Company Champion: Derek Brown
Champion Title: VP of Product Development
IP Ownership: Public Domain

CM:
HT:
ORIE:

Addepar

Company Division/Team: Product

Company Website: addepar.com

Company Challenge:
How might we better objectively assess and rate the creditworthiness of fixed income securities as a service to investors in those securities, who want transparency into the likelihood of those securities defaulting?

Domain: FinTech

Learning Objectives:
Students will learn the how current credit rating systems function in the fixed income markets, along with their shortcomings. Using this information, they will build new software and products for rating fixed income securities. They will also learn how to define, design, develop, and deliver a new product within the financial space.

Faculty Interest: Chuck Whitehead

Company Champion: Derek Brown
Champion Title: VP of Product Development
IP Ownership: Company-Owned

CM:
HT:
ORIE: X

Adobe

Company Division/Team: Digital Media

Company Website: http://www.adobe.com

Company Challenge:
How might we best build a suite of VR-focused creative tools for professional designers (for creating in VR and/or for creating content for VR)?

Domain: Media

Learning Objectives:
VR is going to be the emerging medium for the next decade. Students will learn how to prioritize building creative tools for and within this exciting new medium. They will study the market opportunity, including predictive market-sizing and emerging product opportunities. They will learn how to make a recommendation for the best Go To Market approach for building and deploying a suite of VR-related creative tools.

Faculty Interest: Tap

Company Champion: Avi Muchnick
Champion Title: Director of Products
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

ADP

Company Division/Team: Innovation Lab

Company Website: http://www.adp.com

Company Challenge:
How might we use chatbot and artificial intelligence to improve managers and employees' productivity?

Domain: Social Media, Enterprise

Learning Objectives:
Many people are worried about that people will be replaced by robots for many kinds of jobs. However, we believe that artificial intelligence will augment people's capability in many ways. Through this challenge, we together will learn how we can employ AI, NLP, chat messing platform to solve this great challenge for the whole society. The business impact is obviously huge and the technical challenges are great.

Company Champion: Haifeng Li
Champion Title: Chief Data Scientist
IP Ownership: Public Domain

CM:
HT:
ORIE:

Advance Digital, Inc.

Company Division/Team: Services Development

Company Website: http://advancedigital.com/

Company Challenge:
How might we combine social engagement and local news to inform readers about impactful changes in their daily lives, and empower them to shape these outcomes?

Domain: Media, Social Media, Conversation Interfaces

Learning Objectives:
We're looking to evolve news interaction beyond journalist -> reader, to be more of a social experience that can expand/influence the news (reader <-> reader). The journalist just provides the "prompt", and participates as just another user. Work with Advance Digital, one of the largest media companies in the US. Benefit through access to the content contributions from thousands of journalists associated with the company. See how our Local Media groups, like nj.com, nola.com and others deliver news and benefit their communities. Understand monetization strategies used in local news, and the computer technologies needed to scale to serve thousands of articles every day.

Learn from a case study on an Advance Digital foray into a New Orleans Saints sports news platform. Evaluate what was learned from the venture, both positive and negative. Explore the role trending topics have on user participation. Identify untapped markets that can combine news, bots, and social media. / / Mentor with a champion who has experience in enterprise scale project development in the Agile and DevOps methodology, and served as a co-founder of a three person startup. Gain firsthand experience in various facets of Lean product development, including rapid application prototyping, market analysis, business plan development, deck assembly/presentation, web technologies, and product iteration. John Oliver's Last Week Tonight provides another angle at the struggles of local news.Advance serves the main website covered, OregonLive.
https://www.youtube.com/watch?v=bq2_wSsDwkQ

Company Champion: Shawn Chen
Champion Title: Developer
IP Ownership: Public Domain

CM: X
HT:
ORIE:

Ally Labs

Company Website: http://ally.is

Company Challenge:
How might we enable and incentivize people to do helpful tasks for someone who is less able?

Domain: Health Tech, Internet of Things, Social Entrepreneurship

Learning Objectives:
This challenge gives students the opportunity to learn about and develop new technologies related to sharing economies, social impact and connected health. As the 65+ population is predicted to double by 2050, there is a growing demand to create solutions to support older and at risk community members while reducing the demand on families and paid care. Key areas of interest include how to incentivize care-network participation, bring connected technologies to disconnected households and determine the impact of light-touch interactions on health.

Successful outputs will look into areas of potential business development (including conducting first and second hand market research to identify customer pain points, analyzing existing solutions, market opportunities, channels and revenue models), technology development (including communication technologies, location and routing optimization, sensor data analysis and predictive modeling) as well as evaluating outputs.

Ally Labs will endeavor to provide support and expertise in all of the areas mentioned above.

Company Champion: Zack Mitchell
Champion Title: CTO
IP Ownership: Company-Owned

CM: X
HT: X
ORIE:

Amazon

Company Division/Team: Amazon Drive

Company Website: www.amazon.com

Company Challenge:
How might we use virtual or augmented reality to create a more engaging photo/video experience that motivates 18-24 year olds to upload more frequently?

Domain: Media, AR/VR

Learning Objectives:
In this project, we will push students to develop a customer-centric attitude. Students will need to learn about customer segments, create a proper value proposition, and test prototypes early. When they have a plan, students will need to convey, through data, why their value proposition will lead to happy customers and a good business for Amazon. Lastly, students will have the opportunity to learn about an exciting, industry-changing technology. We hope this provides a challenging project that pushes students to think outside the box across all disciplines.

Company Champion: David Nenke
Champion Title: Director of Amazon Drive
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

AOL

Company Division/Team: AREA 51

Company Website: area51.aol.com

Company Challenge:
How might we deliver news to consumers in a smart connected home environment to create a seamless, entertaining and informed experience?

Domain: Media

Learning Objectives:
This is a futuristic project and there are no right or wrongs. Five years ago, no one expected that over 50% of video consumption will be on mobile, video was watched on TV and PC. With the rise in smart homes and smart interfaces media companies, like AOL, need to plan ahead or innovate to enable its content to continue being consumed anytime everywhere.

Faculty Interest: Deborah, Mor

Company Champion: Osnat
Champion Title: Sr Director Research & Development \ Head of AOL Area 51
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

AOL

Company Division/Team: Aol.com

Company Website: Aol.com

Company Challenge:
How might we create useful information or services to attract new users and drive up engagement of the aol.com homepage?

Domain: Media

Learning Objectives:
In addition to fine tuning their user testing and prototyping skills, students will learn more about the business challenges that traditional digital media outlets are facing in a world growing social media prevalence.

Company Champion: Dave Buck
Champion Title: Head of Product, AOL Core Products
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

AOL

Company Division/Team: AOL Mail

Company Website: mail.aol.com

Company Challenge:
How might we entice people under the age of 30 to choose Aol Mail over alternative email services?

Domain: Media, Utility

Learning Objectives:
In addition to fine tuning their user testing and prototyping skills, students will learn more about UI/UX challenges and web utility.

Faculty Interest: [Mor](#)

Company Champion: Dave Buck
Champion Title: Head of Product, AOL Core Products
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Bill & Melinda Gates Foundation

Company Division/Team: Financial Services for the Poor

Company Website: www.gatesfoundation.org

Company Challenge:
How might we ensure low-income people who mainly live in a cash economy have positive financial health for life?

Domain: FinTech

Learning Objectives:
Our hope is that learning will be shared across everyone who interacts with this Company Challenge. As the Financial Services for the Poor team at the Bill & Melinda Gates Foundation, we work to get more people out of poverty faster and to have fewer people fall into poverty through the design and delivery of digital financial services for low-income people. Through this challenge, we hope that we will all learn more about:

 - What are the real needs and aspirations for low-income people and how might financial services play a critical role?

- When some low-income people operate mostly in cash, how might digital tools amplify what is working and create new possibilities without doing harm to existing norms and behaviors?

 - How do we best deliver digital financial services to people who are excluded - both willingly and unwillingly - from the formal financial sector?

Faculty Interest: Nicki, Chuck Whitehead

Company Champion: Dave Kim
Champion Title: Program Officer
IP Ownership: Public Domain

CM:
HT:
ORIE: X

Bloomberg

Company Division/Team: Data Sciences

Company Website: http://www.bloomberg.com/company

Company Challenge:
How might we make software engineering education engaging, motivating, and accessible to underserved populations?

Domain: Social Entrepreneurship, Social Media, Education

Learning Objectives:
In today's world, knowing how to program is becoming the new norm and many employers look for this skill in candidates. Although we live in a world where technology surrounds us, underserved communities have a major disadvantage in accessing these technologies and preparing their students for the future. In this project, students will develop an education platform (mobile/online/etc.) that will be easily accessible to underserved communities. In addition, the platform will need to be unique in the sense that it doesn't feel like another class or extra homework in order to encourage students and help them retain knowledge. Unlike existing solutions, like Code Academy and MIT Open Courseware, which resemble classwork, this new platform can include gamification (e.g. racecars on a race track or earning badges) and incentives (e.g. internships or scholarships).

Technical students will learn about best practices and the full development cycle in the software industry. In addition, they will get first-hand experience with web and mobile development along with Agile methodologies. Students can use data science and machine learning to track and optimize on student engagement.

MBA students will have the opportunity to perform industry and demographic research to rank potential markets and solutions by impact. By conducting firsthand research, performing SWOT analyses, and developing business models, they will then be able to determine a long term plan for this philanthropic initiative.

Students will have access to the expertise of multiple engineering mentors with a variety of backgrounds in addition to business mentors who have successfully launched multi-million dollar products. Students will also be able to foster collaborations with other organizations like universities and local corporations to implement the initiative in underserved areas nationwide. At the end of the semester, students will have an opportunity to work with Bloomberg Philanthropy and trial the product with communities at Bloomberg's headquarters in NYC.

Faculty Interest: Nicki, Tap

Company Champion: Christopher Hong
Champion Title: Software Engineer
IP Ownership: Public Domain

CM: X
HT:
ORIE:

Bloomberg

Company Division/Team: Global Data

Company Website: http://www.bloomberg.com/company

Company Challenge:
How might we optimize the operational capacity for fitness centers to not only benefit the fitness providers, but also the consumer (economically and health-wise)?

Domain: Ecommerce, Health Tech, Social Entrepreneurship, Social Media,

Learning Objectives:
Most consumers would love the flexibility of choice in planning their fitness and lifestyle goals as opposed to being locked into an expensive monthly membership or cost-prohibitive daily classes. Gyms and specialized fitness providers also need to ensure that they are able to operate at 70-80% capacity to ensure a profit. On average, daily utilization for fitness providers is around 40-50%. This results in pricing models that enforce costly monthly/annual membership structures, and "a la carte" pricing is considered too risky.

Our goal is to help consumers gain and maintain flexibility and ensure gyms/fitness centers are able to increase daily utilization to profitable levels by allowing consumers to sign up for classes across providers at a fixed cost and at the same time helping fitness providers make available excess capacity to consumers that would otherwise remain un-monetized.

Engineering students will need to implement the ability to sync up to gym class schedules in real time and provide end users with the ability to sign up for a class. Key features include back-end billing, inventory management and providing an easy to use application that is customizable based on user preferences. Also, engineers will learn about the entire software development cycle and may be exposed to some big data technologies in order to handle the schedules.

MBA students will need to develop partnerships with local gym/fitness locations to facilitate larger selection of classes for the end user. Based on end user engagement within the application, algorithms to promote fitness apparel and lifestyle brands can also be researched.

Faculty Interest: [Deborah](#)

Company Champion: Liang Zhou
Champion Title: Data Management – Senior Manager
IP Ownership: Public Domain

CM: X
HT: X
ORIE:

Bloomberg

Company Division/Team: Core Financial Apps

Company Website: http://www.bloomberg.com/company

Company Challenge:
How might we notify grocery buyers of Food and Drug Administration (FDA) food recalls faster and more pervasively than the ineffective and bureaucratic status quo, preventing consumer illness and deaths and saving companies millions in fees and recall cos

Domain: Health Tech, Social Media, Consumer Mobile

Learning Objectives:
The traditional recall notification system is slow, ineffective, and unenterprising, leading to unnecessary illness and death. Students tackling this problem will therefore develop entrepreneurial skills common to a mobile development team, such as problem solving, project management, and aggregating and displaying information in a way palatable to users.

Technical aspects: Students will gain exposure to a wide range of technical topics, including integrating with social media APIs, scraping web content to monitor existing recall notifications, and implementing consumer databases. They will learn how to design data stores to be both extensible to more data sources and accessible efficiently. They will keep track of buyers' shopping lists and issue personalized alerts for relevant items in real time. Students will enjoy significant freedom in programming languages and technologies (web, mobile, big data/NLP-based alerting, etc.), but will be expected to defend their selections. Prerequisites: individually, nothing in particular other than general programming competency and experience. Ideally, at least one team member would have experience or interest in working with each of: databases, web development, and mobile development.

Business aspects: Student business objectives will include identifying and collaborating with data partners (e.g. the FDA, retail grocery chains, hospital systems), conducting market research to scope the problem and identify failure points with the current notification system, and determining how this information can be monetized as a "stand alone" product or commingled with other datasets. Example product ideas include: food company product recall scorecards, basic vs premium apps for end users, and selling a commingled feed/enterprise product to the FDA or industry.

Possible extensions to the project include:
* Demonstrating superior notification performance in the wild (compared to existing FDA channels)
* Expanding notifications to other classes of recalls, e.g. pet food, home appliances, furniture, etc.
* Allowing users to make informed buying decisions, highlighting brands with a history of few or no recalls
* Providing a platform for hospitals, food agencies and other authorized sources to alert our system with information of products which have a higher chance of recall

Company Champion: Rushabh Shah
Champion Title: Software Engineer
IP Ownership: Public Domain

CM: X
HT: X
ORIE: X

AOL

Company Division/Team: BUILD

Company Website: aol.com/build

Company Challenge:
How might we create an experience for our viewers that allows them to explore, discover, and share a vast and growing number of live and vod video of celebrity interviews?

Domain: Internet of Things, Media, Social Media

Learning Objectives:
They will discover new and innovative ways to pair consumers to content. In a world where more data than ever before is generated everyday, figuring out how to help end users navigate and discover within this new infinite smorgasbord of mixed media is imperative.

Company Champion: Matt Forte
Champion Title: Producer, Program Manager
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

Canary

Company Division/Team: Engineering

Company Website: https://canary.is

Company Challenge:
How might we help users understand and make choices about the importance of security and privacy in connected consumer products during the purchase process?

Domain: Internet of Things, Security

Learning Objectives:
Students will learn about best practices in securing consumer electronic products, the state of consumer product security, how to evaluate products for security and privacy and then how to communicate this to consumers in an easily digestible way.

Faculty Interest: Vitaly, James Grimmelman, Deborah

Company Champion: Chris Rill
Champion Title: Founder & CTO
IP Ownership: Company-Owned

CM:
HT:
ORIE:

Cantora

Company Website: cantora.com

Company Challenge:
How might we bring personalization and convenience to entertainment to make a better fan experience?

Domain: Media, Entertainment

Learning Objectives:
The live entertainment user experience has barley evolved for fans, artists, brands and event producers since the days of Woodstock. This is n opportunity ti re-imagine how technology could form new bonds between content and fan, empower fans to engage in offline environments, and bring the same kinds of convenience and personalization we experience online to the live entertainment world.

Faculty Interest: [Tap](#), [Mor](#)

Company Champion: Nick Panama
Champion Title: CEO
IP Ownership: Student-Owned

CM: X
HT:
ORIE:

Capital One

Company Division/Team: Consumer Bank, Digital Product Management

Company Website: https://www.capitalonelabs.com

Company Challenge:
How might a consumer/retail bank leverage an emerging technology to empower our users to make smarter personal financial management decisions?

Domain: FinTech, Social Entrepreneurship

Learning Objectives:
Business: Product Market Fit; Business Planning

Technology: Tech Stack; Emerging Technology; Data Science

Product: Design Strategy; Design; Content Strategy; UX/UI; Product Management; Research; User Testing; Empathy Interviews; Survey; Prototyping; MVP

Faculty Interest: Chuck Whitehead

Company Champion: Jeremy Phillips
Champion Title: Digital Product Manager
IP Ownership: Company-Owned

CM:
HT:
ORIE: X

CARMERA

Company Division/Team: Product

Company Website: carmera.co

Company Challenge:
How might we build products on top of the most robust visual index of city streets, to empower urban analysts and built environment planners to make better, faster decisions?

Domain: Internet of Things, Smart City Data, Infrastructure & Mobility, Machine Learning/Computer Vision

Learning Objectives:
There will be a lot of learning opportunities in this challenge as Carmera cuts across many technological waves of our time (Mobile/IoT, "Big GIS", Urban Data, Automated Infrastructure & Mobility, 3D Scanning/Computer Vision, Machine Learning, etc.) and is at a stage where there is a lot of white space with respect to product and business development. The challenge question is top of mind for the company and leadership, which is why the champion for this project will be the CEO. While Carmera is not yet public, there is a brief blurb below about what we do and who we are.

Carmera's mission is to empower urban development and mobility by creating the world's most robust visual index of city streets, accessible to anyone. We collect and process high frequency imagery and 3D scans through a mobile, street-level sensor network, to make the data easily consumable for infrastructure, transportation, real estate, business intelligence and other GIS segments. The company is led by the former VP/data lead at Disqus and the former CTO of MakerBot and Blip.tv, and is backed by institutions and investors such as NYU, START-UP NY, Resolute Ventures, Notation Capital, Joe Montana and Bre Pettis. Carmera is based in New York City.

Faculty Interest: [Mor](Mor)

Company Champion: Ro Gupta
Champion Title: CEO
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

Carnegie Hall

Company Division/Team: Digital Media

Company Website: http://www.carnegiehall.org/

Company Challenge:
How might we use mobile technology to support the use of lullabies by pregnant women and new mothers, who are facing challenging circumstances such as teenage pregnancy, homelessness, or incarceration, to strengthening the bond between parent and child?

Domain: Health Tech, Media, Social Entrepreneurship, Performing Arts

Learning Objectives:
1) Explore and understand the potential role of mobile technology in community-based arts programming.
2) Engage with current research on the effect of music in early childhood development, which Carnegie Hall is conducting separately, in collaboration with a leading medical center and a leading arts research and evaluation firm, as part of Carnegie Hall's Lullaby Project. (More information at: http://www.carnegiehall.org/lullaby/) Explore the possible intersections with the use of mobile technology in public health.
3) Understand the role of community-based, social-impact programs in Carnegie Hall's mission. Analyze and understand the impact that these programs have on participants, as well as the role that mobile technology can play in deepening and extending the impact of these programs.
4) Understand the legal considerations pertaining to music performance rights and the use of music in different media formats.
5) Understand the mission, values, structure, and operations of a not-for-profit performing arts organization, including the interrelated goals and strategies of departments such as artistic programming, education, marketing, and digital media.
6) Cornell Tech students will have the opportunity to meet with and present to the organization's executive and artistic director and members of the senior staff, in addition to other key stakeholders. Students will work most closely with the Digital Media department, members of the Educational Media and Technology team, and members of the Social Impact Programs team in the Weill Music Institute (Carnegie Hall's Education and Community Programs department).

Faculty Interest: Nicki

Company Champion: Christopher Amos
Champion Title: Chief Digital Officer
IP Ownership: Company-Owned

CM: X
HT: X
ORIE:

CARTO

Company Division/Team: Data & Research

Company Website: https://carto.com

Company Challenge:
How might we leverage census data, GIS tools, and advanced geostatistical techniques to identify and prevent algorithmic biases and data discrimination?

Domain: Algorithmic Fairness

Learning Objectives:
Students will learn how to use GIS tools, about working with advanced geospatial statistics, and how to properly use the US American Community Survey.

Faculty Interest: James Grimmelman, Tap

Company Champion: John Krauss
Champion Title: Data Curator
IP Ownership: Public Domain

CM:
HT:
ORIE: X

Center For Aquatic Animal Research and Management

Company Website: http://cfaarm.org

Company Challenge:
How might we catalog and share aquatic animal health data across labs, states, and internationally so that we can manage and predict disease?

Domain: Animal Health

Learning Objectives:
Aquatic Animal Health, Veterinary Medicine, Aquaculture Management, Diagnostic Laboratory Science, Laboratory Management, Business Management, Novel Business Startup, Academic Science Data Management

Company Champion: Stephen Frattini
Champion Title: Owner/President
IP Ownership: Company-Owned

CM:
HT: X
ORIE: X

Citi

Company Division/Team: Technology

Company Website: http://www.citigroup.com/citi/

Company Challenge:
How might we use social networking or other contemporary technologies to improve employee collaboration and workforce effectiveness at Citi?

Domain: FinTech, Social Media, Workforce technology

Learning Objectives:
Students will learn to problem solve in order to connect such a large global financial institution by using different forms of technology.

Faculty Interest: [Mor](#)

Company Champion: Yannie Murphy
Champion Title: Director
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Citrusbyte | Infor IoT

Company Division/Team: Product Management & Design, New York City

Company Website: https://citrusbyte.com

Company Challenge:
How might we use IoT to improve health outcomes during hospital triage and emergency care experiences?

Domain: Health Tech, Internet of Things

Learning Objectives:
Students will learn a practical approach to the product discovery process as applied by our product teams within the context of hospitals, medical services organizations and a large technology enterprise. Our approach to product discovery includes activities such as user research, market research, business model planning, product concept development, design sprint workshops, prototyping/functional software and usability testing. We will also advise student teams on our methodology for product design/software development using lean-agile execution models. We look forward to mentoring teams on product marketing and launch based on our track record of developing IoT services solutions for Fortune 500 companies.

Faculty Interest: [Deborah](#)

Company Champion: Eric Chambers
Champion Title: Product Manager
IP Ownership: Company-Owned

CM:
HT: X
ORIE: X

City of New York

Company Division/Team: Mayor's Office of Tech + Innovation

Company Website: nyc.gov/forward

Company Challenge:
How might we enable City employees with limited to no technical knowledge to easily open up and automate creation and sharing of publicly shareable datasets through the City open data portal?

Domain: Media, Social Entrepreneurship, Data

Learning Objectives:
Students would have the opportunity to receive hands-on learning in the following areas:

- process mapping
- application development and prototyping
- user research and testing
- systems integration
- data privacy and anonymization
- open data

Faculty Interest: James Grimmelman

Company Champion: Jeff Merritt
Champion Title: Director of Innovation
IP Ownership: Public Domain

CM:
HT:
ORIE: X

Cornell Legal Information Institute

Company Website: https://www.law.cornell.edu/

Company Challenge:
How might we link standardized product codes tied to medical products (e.g., drugs) and medical devices with Title 21 of the Code of Federal Regulations so that businesses can easily understand what regulatory requirements their products are subject to, and in the process, create a tractable template/approach to tagging in other areas, both in terms of industries/products and CFR sections?

Domain: Law

Learning Objectives:
Familiarity with legal informatics, regulatory compliance, and standardized business-to-business databases and taxonomies.

Faculty Interest: James Grimmelman, Chuck Whitehead

Company Champion: Thomas Bruce
Champion Title: Director
IP Ownership: Student-Owned

CM:
HT: X
ORIE:

Cornell Tech

Company Division/Team: Faculty Challenge

Company Website: tech.cornell.edu

Company Challenge:
How might we build a product around recent advances in password based authentication to help companies recover revenue lost to turned-away customers, without any significant loss in security?

Domain: Security

Learning Objectives:
Students will learn about the latest, award-winning research from Cornell Tech's security faculty on authentication technologies and have the opportunity to work with these faculty on how to productize the recent advances. In addition to tackling the software engineering questions about how to integrate these technologies into various potential systems, students will explore what strategy could make for a marketable product (e.g., licensing proprietary software to enterprises, authentication-as-a-service cloud offering, developing an open-source ecosystem, etc.). Students will learn about the commercial security ecosystem, touch base with potential business customers, and have the opportunity to collaborate with a complementary effort by Cornell Tech's in-house software engineering team, the Foundry, on an open-source version of related technologies.

 What impact will this project have?
The goal of the project is nothing less than to transform today's password management ecosystem, making technologies superior to the state of the art at leading enterprises available to organizations large and small. We can start by realizing our newly invented techniques for tolerating typographical errors in passwords. Deployment of this technology will make authentication easier for users and help companies recover revenue lost to turned-away customers, without any significant loss in security.

Faculty Interest: Ari Juels, Tom Ristenpart

Company Champion: Ari Juels
Champion Title: Professor
IP Ownership: Company-Owned

CM:
HT:
ORIE:

Cornell Tech

Company Division/Team: S.Tech + Foundry

Company Website: http://stech.nyc

Company Challenge:
How might we design a public-library-based technology that helps people safely lend and borrow resources like household items, tools, and non-library books?

Domain: Internet of Things, Social Entrepreneurship, Social Media

Learning Objectives:
Building software + hardware prototypes, engaging with different populations and stakeholders, overcoming socio-technical barriers like trust.

Faculty Interest: Nicki, Mor

Company Champion: Mor Naaman
Champion Title: Professor
IP Ownership: Public Domain

CM: X
HT:
ORIE:

Cylance Inc

Company Website: www.cylance.com

Company Challenge:
How might we use AI to find unhappy or disgruntled employees not aligned with the best interests of the business?

Domain: Ecommerce, FinTech, Internet of Things, Media, Security, Social Entrepreneurship, Social Media

Learning Objectives:
How to bridge out the theoretical to the practical.

Company Champion: Glenn Chisholm
Champion Title: CTO
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Dexter

Company Website: https://rundexter.com

Company Challenge:
How might we help businesses improve their customer acquisition, retention, and support efforts by empowering them to easily create and host automated chat systems?

Domain: Ecommerce

Learning Objectives:
I think this challenge presents great learning opportunities on both the business and tech sides.

Business: there is a great "get out into the real world and talk to your customers" opportunity. You cannot be successful at the challenge unless you talk to real businesses to understand their pain points around the three specific areas outlined. And the fact that the solutions could likely change depending on size and type of business means it requires analysis and conscious narrowing of scope & addressable audience.

Tech: chatbots are seemingly becoming more popular and ubiquitous by the day, and students can expect to dive deep into this emergent field. The industry has yet to establish firm opinions on questions like the best role of machine learning/AI, what are essential KPIs to track, and how to best react and adapt to evolving platforms over time. Dexter expects to lend its experience and learnings in the field so the students leave as experts.

Company Champion: David Hu
Champion Title: VP Engineering
IP Ownership: Company-Owned

CM:
HT:
ORIE:

eBay

Company Division/Team: Ads Traffic & Merchandising

Company Website: http://www.ebaynyc.com/

Company Challenge:
How might we customize a major e-commerce site for users who we know almost nothing about?

Domain: Ecommerce, Media

Learning Objectives:
As Marc Andreessen said, software is eating the world. It's changing the way we do everything, no exceptions. At eBay, we're continuing to change the way people shop and sell. Others are changing the way we try on items (eg Zeekit.co, Stitchfix.com, etc). And, many other parts of the shopping and browsing experience are still ripe for disruption. All of them will need to contend with the Cold Start problem. This challenge is broadly applicable to e-commerce sites (eg eBay and NewEgg), social and news aggregators (eg Reddit and Twitter), and a multitude of other online domains. Any site with millions of listings, is forced to pick just a handful of items to share on a landing page, in the hopes of capturing the attention of users they know almost nothing about. A corollary to the cold start problem, is the fingerprinting problem. eBay sees over half its GMV (a sales measure) involving a mobile touch point. Users frequently browse on mobile, and then sign-in only when ready to purchase. How might we short circuit the cold start problem, by identifying these users? This also is a big deal for sites like Reddit, who see 80% or more of their unique active users as guests. How might we customize a major e-commerce site for users who we know almost nothing about? We're eager to see what you come up with.

Some fertile places to begin: Current events and seasonality. Using data from other visitors or local events occurring around the same time. How to incorporate trending topics? Think Brexit and Pokemon Go. How to fingerprint users who might have an account, but are logged out? Modify current solutions (ideally sites with open APIs). Eg NYtimes, Wikipedia, eBay, open data sets, Reddit, Twitter, or Flipboard. Utilizing referrer and other data.

Company Champion: Harry Davis
Champion Title: Software Engineer III
IP Ownership: Public Domain

CM:
HT:
ORIE: X

Eli Lilly & Co.

Company Division/Team: LRL/Neuroscience

Company Website: www.lilly.com

Company Challenge:
How might we leverage the latest research on Alzheimer's disease to identify people that are about to develop it?

Domain: Health Tech

Learning Objectives:
Alzheimer's disease takes an enormous personal and economic toll on our society. It is an insidious disease that develops over many years. Many novel treatments under development aim to stop/slow the progression of the disease. Thus, identifying patients as early as possible, and starting them on medication, will give them the best chance to enjoy normal activity for longer. Students will learn how to apply innovative technology from disparate areas to help address this critical healthcare issue. Students will learn the basic course and symptoms of Alzheimer's disease; but, an in-depth knowledge of the underlying biology or clinical symptoms is NOT required. Lilly internal experts from multiple disciplines (e.g., human cognition, imaging, neurobiology, and genetics) will be available for consultation. A meaningful solution has the potential to both have an enormous economic impact and directly influence the lives of millions of patients and their families.

Faculty Interest: [Deborah](#)

Company Champion: Kurt Rasmussen
Champion Title: Senior Research Advisor
IP Ownership: Company-Owned

CM:
HT: X
ORIE: X

Eli Lilly & Co.

Company Division/Team: Health Tech

Company Website: https://www.lilly.com/home.aspx

Company Challenge:
How might we accurately report how intensely a person is experiencing pain to better inform the efficacy of pain medications for those seeking pain relief?

Domain: Health Tech

Learning Objectives:
Students will gain an understanding of a currently high unmet medical need and how to create a potential solution that could impact millions of patients worlwide. They would also gain insight into the way biomedical research challenges are approached and solved and what methods are used to reach solutions in a highly matrixed team-based environment. Should they reach a potential solution, then they would learn what criteria will be used to assess the opportunity for tractability in a highly regulated industry. Students would have access to data (both internal and publically available). I've been discussing this project with one of our internal experts, Dr. Brad Miller (Sr Director-Neuroscience), who would be a Co-Mentor.

Faculty Interest: [Deborah](#)

Company Champion: Christian Felder
Champion Title: Research Fellow
IP Ownership: Student-Owned

CM:
HT: X
ORIE: X

EY

Company Division/Team: Global Innovation Team

Company Website: www.ey.com

Company Challenge:
How might we use blockchain and smart contracts to forge stronger relationships with customers, suppliers, and internal stakeholders?

Domain: Ecommerce, FinTech, Internet of Things, Security

Learning Objectives:
Students will learn about blockchain applications in the context of smart contracts to drive secure, conditional transactions, and how they might facilitate a more automated and reliable business environment. We will use these innovations to improve EY's own internal operations, and then we will look to bring them to our clients around the world.

Faculty Interest: Chuck Whitehead

Company Champion: Paul Brody
Champion Title: Global Blockchain Innovation Leader, EY
IP Ownership: Company-Owned

CM:
HT:
ORIE:

Ferrero

Company Division/Team: Science

Company Website: ferrero.com

Company Challenge:
How might we deliver great chocolate products like Ferrero Rocher or Kinder Surprise to emerging markets with challenging temperatures?

Domain: Ecommerce, Internet of Things, Social Entrepreneurship, material science, logistics

Learning Objectives:
Out of the box thinking. Understanding of how complex challenges could be solved with different technologies and/or business models. Can a new material be used to provide heat insulation with packaging? Can the product be distributed in novel ways? Can distributed manufacturing models be the answer?

Company Champion: Giovanni Battistini
Champion Title: VP, O&S Science
IP Ownership: Student-Owned

CM:
HT:
ORIE:

frog

Company Website: http://www.frogdesign.com/

Company Challenge:
How might we use wearables and/or sensors to enhance a design researcher's ability to draw more valuable insights while in the field?

Domain: Product Design, Wearable Tech

Learning Objectives:
As a product design firm ourselves, we are constantly trying to improve our processes and tools to excel at making products. We believe that user research is an essential part of any human-centered design program - it is core to what we do and we want to do it better. In designing a solution to our ask, students will gain a deeper understanding of qualitative research, human behavior, and the design process as a whole. Students will be asked to explore a number of technical domains, for instance, computer vision, physical computing, AI, NLP, sentiment analysis, and human-computer interaction. As part of this engagement, we can also offer students a chance to learn how we do product design.

Company Champion: Ahmad Saeed
Champion Title: Associate Director of Technology
IP Ownership: Public Domain

CM: X
HT:
ORIE:

GE

Company Division/Team: Current, Powered by GE

Company Website: http://www.currentbyge.com/

Company Challenge:
How might we create a platform for intelligent cities that unleash the creativity of app developers to address civic challenges?

Domain: Ecommerce, Internet of Things

Learning Objectives:
Students will actively research an evolving industry, understand market opportunities and propose models and solutions that result in the creation of markets focused on the future of energy and evolution of the industrial internet.

Faculty Interest: [Tap](Tap)

Company Champion: Nick Perugini
Champion Title: CIO, Current Powered by GE
IP Ownership: Company-Owned

CM:
HT:
ORIE: X

GiveNext

Company Website: www.givenext.com

Company Challenge:
How might we create the easiest way for donors to trasnact and manage charitable giving to any cause in the world?

Domain: FinTech, Social Entrepreneurship, nonprofits and philanthropy

Learning Objectives:
• Why the nonprofit "industry" is still dominated by direct mail two decades into the internet era.
• What are the legal and tax implications of giving in the US and internationally?
• The current (and future) technologies and platforms for processing online transactions - what drives down costs.
• How to present personal and comprehensive philanthropic data to donors and nonprofits.
• How to integrate behavioral economics and psychology to a technology solution.

Company Champion: Daniel Mansoor
Champion Title: Founder/CEO
IP Ownership: Company-Owned

CM:
HT:
ORIE:

Google

Company Division/Team: CIO

Company Website: https://www.google.com/intl/en/about/

Company Challenge:
How might we apply speech, natural language processing or machine learning to create innovative experience to better assist customers who call Google for support?

Domain: Ecommerce, Social Media, Customer Support

Learning Objectives:
How leading-edge technology may shape the future of customer support in the future, and enable companies to differentiate their brands, at scale.

Faculty Interest: Ron Brachman, Yoav

Company Champion: Paul Hahn
Champion Title: Mgr, Customer Support Applications
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

Google

Company Division/Team: Expeditions

Company Website: https://g.co/expeditions

Company Challenge:
How might we improve education by creating subject-specific engaging VR experiences for K-12 and college students?

Domain: Media, Social Entrepreneurship

Learning Objectives:
VR, education pedagogy, education content

Faculty Interest: Nicki, Tap

Company Champion: Shawn Buessing
Champion Title: Engineering Manager
IP Ownership: Public Domain

CM: X
HT:
ORIE:

Google

Company Division/Team: Research

Company Website: http://research.google.com/

Company Challenge:
How might we encourage people to get a balanced view on controversial topics such as gun control regardless of their (political) leanings?

Domain: Media, Social Entrepreneurship

Learning Objectives:
We expect the students to learn and develop techniques that aim to diversify the discourse in news consumption to address the increasingly serious problem of filter bubble caused by unprecedented personalization.

Faculty Interest: Nicki, Mor

Company Champion: Cong Yu
Champion Title: Research Scientist, Manager
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Hearst

Company Division/Team: Corporate Technology

Company Website: hearst.com

Company Challenge:
How might we facilitate information and knowledge sharing across Hearst businesses and encourage connections between teams?

Domain: Media, Social Entrepreneurship, Social Media, Business intelligence, Modern Workplace, Collaboration, Data & Analytics, Behavioral psychology, etc.

Learning Objectives:
Students will learn design principles, software development life-cycles (product concept to mockups to prototype, etc), user experience paths, etc.

Company Champion: Jon Chu
Champion Title: Director, Hearst User Experience
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Human Rights Watch

Company Division/Team: IT Department

Company Website: HRW.org

Company Challenge:
How might we balance the need to encrypt emails while supporting typical functionality like email search, in order to help streamline HRW's highly sensitive operations?

Domain: Security,

Learning Objectives:
Students will learn about HRW's mission and the substantial information security challenges faced by HRW, as it is a frequent target of attack and deals with highly sensitive material from sources around the world. They will learn about search over encrypted data, a hot technology area focused on by a number of recent startups, more mature companies, and research by Cornell Tech faculty. It attempts to allow traditional keyword search (find me all emails that include "HRW") while not leaking plaintext data to servers where encrypted data is stored (and which may be compromised by attackers). Students will learn about the various productization routes being pursued in this space, including licensing of proprietary software, cloud-based security tools, and others, including the associated business models, and may uncover opportunities for new commercialization strategies.

Faculty Interest: Vitaly, Tom

Company Champion: Chuck Lustig
Champion Title: DED Operations
IP Ownership: Public Domain

CM:
HT:
ORIE:

IBM Corporation

Company Division/Team: Watson Health

Company Website: http://www.ibm.com/watson/health/

Company Challenge:
How might we effectively promote holistic wellness through healthy lifestyles early in life?

Domain: Health Tech, Internet of Things, Social Media

Learning Objectives:
Students will learn about the opportunities and challenges of promoting wellness, including in particular:

- The economics of healthcare systems in developed economies, and the burden of chronic disease on society as a whole.
- The potential impact of wellness oriented lifestyles on an individual's health and on healthcare costs.
- The challenge of motivating behavioral change when healthy individuals are confronted with long term incentives only.
- The application of gaming and cognitive technologies (including data analytics) to manage incentives and personalization in a new domain with potentially very large benefits to society.

Faculty Interest: Deborah

Company Champion: Francisco Curbera
Champion Title: Director, Foundational Technology
IP Ownership: Public Domain

CM:
HT: X
ORIE:

JetBlue

Company Division/Team: JetBlue Technology Ventures

Company Website: www.JetBlue.com

Company Challenge:
How might we create a seamless, frictionless and magical airport experience for travelers with unique challenges (families, mobility challenged, minors, elderly and/or international travelers)?

Domain: Internet of Things, Security, Travel Tech

Learning Objectives:
The students will have the opportunity to work on a real world problem using emerging technologies in the exciting domain of travel. They will have access to NY's hometown airline, JetBlue and terminal 5 at JFK, and will be able to partner directly with JetBlue's venture arm in Silicon Valley. This project will give the students access to the growing travel tech startup ecosystems in NY, Silicon Valley and Tel Aviv (through our partnership with El Al's Cockpit Innovation Hub).

Company Champion: Bonny Simi
Champion Title: President JetBlue Technology Ventures
IP Ownership: Student-Owned

CM: X
HT:
ORIE: X

Junto Health

Company Division/Team: Behavioral Health Cluster

Company Website: www.juntohealth.org

Company Challenge:
How might we improve patient outcomes by leveraging unstructured behavioral health data to create cost-effective risk stratification tools and clinically-validated intervention protocols?

Domain: Health Tech, Social Entrepreneurship

Learning Objectives:
Information Science: how to organize, analyze unstructured health care data from multiple data sources +Technology: how to design & implement predictive models within a tightly constrained (regulatory, bandwidth) industry + Business: real world insight into the dizzying financial incentive structures & complex technology procurement processes used by vast majority of health care stakeholders; how to use a user-centric approach to developing & deploying technology into the health care industry without creating workflow challenges for end users; how to sell into health care stakeholders by working with end users (health care providers); identification of unmet needs within health care that could be solved with novel technology & tech-enabled services + Policy & Law: how top-down policy changes and payment reform impact the business models of existing health care stakeholders; insight into the challenges & opportunities health care stakeholders face within the shift to value; how the policy & technology curves influence each other, and how the industry could improve by linking policy & technology silos. Active Members of Behavioral Health Cluster: The Jewish Board, New York Presbyterian, HP Enterprise, Boehringer-Ingelheim, Safeguard Scientifics

Principal of Project: Though all members above are active in this cluster, The Jewish Board would be the principal provider in this company challenge as they have already drafted a handful of specific challenges/opportunities that would be meaningful and (with guidance) could pull relevant data from their systems. Junto would be here to act as liaison to Cornell Tech.

Background on Jewish Board: The Jewish Board is one of the largest mental health/social services agencies in the US & largest in NYS, seeing over 50,000 patients annually. They interact with many, many other health providers, are active in multiple DSRIP PPS's, and are partnered with multiple health homes. They have access to lots of data, but lack the experience/expertise to make use of it in clinically relevant ways.

Senior Level Buy In Junto has buy-in from Jewish Board's senior leadership, who are personally active in this cluster, including: Chief Clinical & Medical Officer, Chief Program Officer, General Counsel, CIO

Company Champion: Doug Hayes
Champion Title: CEO, Founder
IP Ownership: Public Domain

CM:
HT: X
ORIE: X

Justly Inc.

Company Division/Team: Data Science/Technology

Company Website: http:www.justly.com

Company Challenge:
How might we help judges and public officers leverage public data in assessing the "reasonableness" of attorneys' fees in bankruptcy and other court proceedings?

Domain: Legal/Procurement Tech

Learning Objectives:
They will learn that the American legal system is sitting on a trove of public data that can (and will) be leveraged to improve the system, foster the development of an efficient market for the business community, and improve access to justice for all.

Faculty Interest: Chuck Whitehead

Company Champion: Laurent Wiesel
Champion Title: CEO
IP Ownership: Company-Owned

CM:
HT:
ORIE: X

LexisNexia

Company Division/Team: Global Technology

Company Website: www.lexisnexis.com

Company Challenge:
How might we use the blockchain technology to certify the IP rights in contracts to support automated audit capabilities?

Domain: Ecommerce, Internet of Things, Media, Any business where technology is a differentiator

Learning Objectives:
Ensuring that IP rights are partitioned without conflict across multiple contracts is an unsolved problem. Blockchain technology could provide a public immutable certification that IP offered in a contract was in fact available. Students will learn technology, business, and law domains intersect in the problem of IP rights across contracts; How blockchain technology can offer a solution; How the IP rights problem-blockchain solution offers a fertile environment for a new product and possibly a new business. And lastly, one of the most important learnings from this solution is that problems on the frontier of our knowledge frequently require cross-domain and interdisciplinary expertise.

Faculty Interest: Ari Juels, James Grimmelman

Company Champion: Ian Koenig
Champion Title: Chief Architect
IP Ownership: Public Domain

CM:
HT:
ORIE:

McKinsey & Company

Company Division/Team: Solutions

Company Website: http://www.mckinsey.com/

Company Challenge:
How might we make insurance truly personalized, integrated and easily accessible for younger consumers who may not understand the long-term financial and other benefits of these often complex products?

Domain: Health Tech

Learning Objectives:
- Identify ways existing and emerging technologies can improve/simplify the transactions and other life cycle events associated with insurance products
- Investigate how advanced analytics can redefine / transform interactions between insurance consumers and insurance companies
- Examine how the insurance industry / marketplace could be transformed (e.g., simplification of the ecosystem) What really could lend itself to innovation is how all of these changes could make insurance product more accessible, understandable and useful to the younger demographic. We are at a point where (in some countries) you can apply for a mortgage via your phone while you are standing in front of house for sale. How do we bring that type of consumer centric innovation to insurance given advances in technology and analytics. THAT would be amazing. The insurance industry is going to completely transform in the next 2-4 years as a result of several forces:

- availability of data
- growth of data
- wearables / Internet of things
- advanced analytics (specifically increasing ability to predict short and long term outcomes)

This will lead to things like:
- no more interviews / blood tests / exams / questionnaires for Life insurance
- completely new insurance products (e.g., covering a person who utilizes car-sharing of self driving vehicles)
- insurers monitoring homes and entering industries like home maintenance
- drones doing inspections of vehicle damage for auto / commercial

These changes are going to be RADICAL and completely change the nature of the industry. Most interesting – none of this stuff has been figured out, so its open to innovation.

Faculty Interest: Chuck Whitehead

Company Champion: Doug McElhaney
Champion Title: Solution VP
IP Ownership: Student-Owned

CM:
HT: X
ORIE:

Medium

Company Division/Team: Creators

Company Website: medium.com

Company Challenge:
How might we make it easier for people who have something they want to write get their ideas into words?

Domain: Media, Social Media

Learning Objectives:
The way that people conceive, collect, articulate, and distribute their thinking. How people think about the distribution of ideas -- the fear of "putting yourself out there" for widely distributed ideas, the feeling of viral success, and the intent to reach a particular influential group. As entrepreneurs, it could help them understand how others materialize their ideas, providing insight into the creation process for themselves.

Company Champion: Joe Polastre
Champion Title: Product Lead
IP Ownership: Public Domain

CM: X
HT:
ORIE:

Meetup Inc.

Company Division/Team: Technology

Company Website: http://www.meetup.com

Company Challenge:
How might we measure and iteratively improve the quality of in person meetups so that our members increasingly show up, do things together, and actually talk?

Domain: Social Entrepreneurship, Social Media,

Learning Objectives:
- Using newer technologies (mobile, IoT, chatbots) to build software product that helps connect people in real time and in real life to a software platform

- Testing their ideas by going to Meetups and interacting with organizers and members both onl

Faculty Interest: Deborah, Mor

Company Champion: Yvette Pasqua
Champion Title: Chief Technology Officer
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Mercer

Company Division/Team: Global Innovation Hub

Company Website: www.mercer.com

Company Challenge:
How might companies share and monetize excess labor capacity while allowing individuals to maximize career potential?

Domain: Internet of Things, workforce reinvention and optimization

Learning Objectives:
Students will have a chance to challenge the traditional definition of work, company, and career. Learning how new and emerging trends will affect the future of employment. Developing the ideal solutions will not only require students to grasp a range of areas, including technology, finance, business, marketing, and regulation, it will truly challenge students' ability to think outside the box and imagine the unimaginable. This particular idea will give students an opportunity to challenge how people have worked for decades and create a more dynamic working environment for themselves when they enter into the workplace.

Company Champion: Patty Sung
Champion Title: Principal
IP Ownership: Company-Owned

CM:
HT:
ORIE: X

Merck

Company Division/Team: Center for Observational and Real World Evidence

Company Website: www.merck.com

Company Challenge:
How might we create a tool or platform for public health professionals and community leaders to quantitatively explore/simulate data-driven inferences/scenarios from multiple perspectives (e.g., vaccines) to support balanced decision making?

Domain: Health Tech, Media

Learning Objectives:
Students will learn to gather and synthesize multiple disparate stores of "big data" (global burden of disease, economic, demographic, geographic, climate, etc) and then creatively analyze and display its output. This will give exposure to not only data analysis but also incorporating critical aspects of design, user interface and experience with telling a data story. The final project could be a live user interface or web application that streams live data and automatically updates as new data becomes available, so the students will have an opportunity to be creative and define their own needs and goals. Additionally students will get exposure to quantitative researchers, senior executives and other decision makers potentially across many cross-functional departments.

Company Champion: Aman Bhandari, PhD
Champion Title: Executive Director
IP Ownership: Student-Owned

CM: X
HT: X
ORIE: X

Merck

Company Division/Team: Data Sciences and Insights

Company Website: www.merck.com

Company Challenge:
How might we use blockchain to overcome a current data sharing bottleneck in the healthcare system to allow more control for patients?

Domain: Health Tech

Learning Objectives:
As blockchain is an extremely nascent technology, students will get exposure to a cutting edge area. Further since there are very few blockchain experts and possibly none in healthcare this could be a truly pioneering effort. There is great excitement around the use of blockchain, but it is unclear what the real applications to healthcare are and furthermore how it might really work and under what conditions. Working on something truly cutting edge would not only be valuable to the students but it could offer a valuable contribution to the health tech community at large.

Faculty Interest: Chuck Whitehead

Company Champion: Aman Bhandari
Champion Title: Executive Director
IP Ownership: Student-Owned

CM:
HT: X
ORIE:

Mozilla Corporation

Company Division/Team: Web Sustainability

Company Website: mozilla.org

Company Challenge:
How might we create a payment solution that services all publishers without subscriptions and makes users feel good about paying for content?

Domain: FinTech, Media

Learning Objectives:
Digital advertising has been both the dominant method of monetizing Web content for publishers since the start of the web, but now it increasingly appears hostile towards consumers and usability. Students will learn to think outside of the current content monetization norms and build a solution that could scale broadly across the open internet.

Company Champion: Kevin Ghim
Champion Title: Product Lead
IP Ownership: Public Domain

CM: X
HT:
ORIE:

NBCUniversal

Company Division/Team: News Technology

Company Website: http://www.nbcuniversal.com/

Company Challenge:
How might we proactively notify customers of the NBCUniversal content that they care about, across platforms to increase engagement and viewership?

Domain: Media

Learning Objectives:
Students will be able to exercise both business strategy and technical skills, gaining hands on experience in one of the world's leading media and entertainment companies. This challenge immerses students in connective media from the critical core technology and media systems, psychology and social aspects of our users, and the business strategy for monetization.

Company Champion: Apsara Sivamurthy
Champion Title: Vice President, Program Management, NBC News Digital Program Management
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

New York Daily News

Company Division/Team: Digital

Company Website: www.nydailynews.com

Company Challenge:
How might we leverage interactive voice technologies to attract, engage, and monetize new audiences?

Domain: Ecommerce, Internet of Things, Media, Social Media,

Learning Objectives:
Students tackling a Company Challenge for the New York Daily News will interact with executives across the Company (including the Company's EVP/Digital; SVP/General Counsel and Corporate Development; VP/Product Development; VP/Development and Tech Ops; and Director/Digital Editorial Operations) to accelerate the New York Daily News's efforts to experiment with new technologies to find new ways to attract, engage, and monetize audiences. The New York Daily News's goal in participating in the Cornell Tech Challenge is to uncover innovative approaches to tackling real challenges facing the Company. Students will have access to the New York Daily News employees addressing these issues, and will have the opportunity to learn from them and their experiences. Students working with the New York Daily News will get real insight into the inner workings of a top tier news organization. We look forward to working with you!

About the New York Daily News
With 2 million readers in New York, and 42 million national unique visitors online each month, the New York Daily News is the most widely read tabloid in the city and one of America's fastest-growing web sites. Covering breaking news, politics, sports, entertainment, celebrity, lifestyle, opinion, business and health, the New York Daily News delivers up-to-the-minute reporting, rich photography and compelling video to readers of its print newspaper, industry-leading website, tablet apps, and iPhone, Blackberry and Android editions.
The New York Daily News has won 10 Pulitzer Prize Awards for excellence in journalism. In 2013, it was awarded four New York State Associated Press Association awards and took the Associated Press Sports Editors awards' "Triple Crown" as well as first place in the Investigative category across all circulation categories. In addition to its news operations, the New York Daily News runs Daily News Digital Solutions and the Innovation Lab.

Faculty Interest: [Tap](#)

Company Champion: Cyna Alderman
Champion Title: Senior Vice President, Corporate Development & General Counsel, Daily News; Managing Director, Daily News Innovation Lab
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Nielsen

Company Division/Team: Data Science

Company Website: http://www.nielsen.com

Company Challenge:
How might we discover and present the unique story behind a target audience to better empower media planners?

Domain: Media

Learning Objectives:
- Work with data science leadership at Nielsen, including Sr. Principal Data Scientist and SVP of Pointlogic, a Nielsen Company, to solve a challenge currently facing the media industry.

- Translate data from 50,000 to 200,000 respondents and thousands of variables into insights about a target audience using machine learning or analytics.

- Develop a new user friendly tool to illustrate a story that can create portraits and profiles of the audience with speed and graphics/visualizations.

- Refine definitions to focus on a core group; work with a narrow range of variables related to communications and identify opportunities (i.e. High impact media).

Company Champion: Jennifer Shin
Champion Title: Sr. Principal Data Scientist
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

NYC Mayor's Office to Combat Domestic Violence

Company Website: www.nyc.gov/domesticviolence

Company Challenge:
How might we create a mobile application that provides comprehensive and multi-disciplinary information, tools and resources for domestic violence and sexual assault survivors while also protecting their safety and privacy?

Domain: Health Tech, Media, Security, Domestic Violence, Public Safety

Learning Objectives:
In developing a mobile application for use by survivors of domestic violence and sexual assault in NYC, students will learn about the dynamics of an abusive relationship, important factors to consider in safety planning for survivors, effective ways to distribute educational information to survivors about healthy relationships and about the wide range of social, civil legal and criminal justice services and systems available to survivors throughout the City.

Students will have the opportunity to work with Commissioner Cecile Noel, the executive leadership of the Mayor's Office to Combat Domestic Violence, and will have access to other top health/safety/gender City officials; similarly, students will have the ability to work with the City's marketing and communications officials to brainstorm effective roll-out and marketing strategies. The students' work will have the potential to influence our effort to deploy such an application across New York City, with the potential to positively affect thousands of lives.

Additionally, students working on this project would learn the myriad technology-related safety risks that domestic violence survivors face. The successful mobile application will need to include tools and supports to ensure that survivors who access this mobile application do not put themselves at risk in doing so. Additionally, the successful mobile application will provide survivors of domestic violence with information on, and direct access to, the benefits of the information regarding the options that are available to survivors in seeking services and/or safety, and to provide direct linkages to those resources in the City.

Faculty Interest: Nicki, Tom

Company Champion: Elizabeth Dank
Champion Title: Assistant Commissioner
IP Ownership: Company-Owned

CM:
HT:
ORIE:

Pfizer

Company Division/Team: Pfizer Oncology

Company Website: www.pfizer.com

Company Challenge:
How might we better incorporate input from patients or patient advocates into our work and decision making?

Domain: Health Tech

Learning Objectives:
Students will get exposure to the dynamics of the oncology pharma environment, and very specifically the abilit to better connect needs and interests of patients to the offerings provided by pharma.

Company Champion: Al Ribeiro
Champion Title: Lead Corporate Affairs Oncology
IP Ownership: Company-Owned

CM:
HT: X
ORIE:

Pure House

Company Division/Team: Business Development

Company Website: http://purehouse.org/

Company Challenge:
How might we enhance the co-living experience to build and empower communities?

Domain: Social Entrepreneurship, Social Media, Smart Buildings

Learning Objectives:
> Build a digital social interface

> Understand the challenges and opportunities in reinventing the way we occupy and share buildings

> Bridge real-life community and social networks

> Develop a management tool for the creation and evolution of communities

> Cross disciplines with the planning and architecture colleges at Cornell.

Pure House Lab is a 12-month project located in Paris and New York, and will result in a series of real-world development across the world. The solution developed will be considered for implementation in each of those new developments.

Faculty Interest: [Mor](Mor)

Company Champion: Claire Flurin
Champion Title: Director of Pure House Lab
IP Ownership: Public Domain

CM: X
HT:
ORIE:

Recyclebank

Company Division/Team: Marketing, Product, Technology

Company Website: Recyclebank.com

Company Challenge:
How might we drive behavior change and create long term habits among students to increase recycling participation, capture more recyclables, decrease contamination and decrease waste on University campuses?

Domain: FinTech, Social Entrepreneurship, Social Media, Sustainability

Learning Objectives:
Recyclebank has been in the business of encouraging positive environmental behaviors with 4M residents in over 300 communities for the past 12 years. We would like to expand our platform to University campuses where we believe there can be significant benefits for all constituents – University, students and, of course, the planet. Students will learn about: sustainability-focused behavior change marketing, business model management, behavioral economics, product development, marketing launch/management and technology development. The opportunity to think outside the box and develop an innovative way to educate University campus students on recycling through the entire lifecycle of development: needs assessment, hypothesis management, idea generation, testing/prototype, launch and on-going assessment/management/insight tracking of in-field launch.

Company Champion: Jeannine Camardo Pine
Champion Title: VP, Marketing
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Robin Hood Foundation

Company Division/Team: Program

Company Website: www.robinhood.org

Company Challenge:
How might we track and enroll 200,000 low-income New Yorkers in life-saving public benefits?

Domain: Social Entrepreneurship, Poverty Alleviation

Learning Objectives:
The unique challenges of a multi-faceted, multi-collaborative effort (what we are dubbing a Campaign) to help hundreds of thousands of low-income New Yorkers.

Specifically, we need a tracking system to help track and assist low-income individuals on their journey to apply and be approved for various public benefits like Earned Income Tax Credit, food stamps, and WIC. We would imagine building it on top of an existing app (e.g., Salesforce or other CRM) rather than from scratch.

MVP would have:
+ Encrypted data architecture
+ Ability to identify individuals by PII
+ Separate accounts for CBOs
+ State-based tracking (e.g., contacted, began application, application complete) – and who did they interact with (so we can see how many times we've contacted people)
+ Basic analytics across enrollment life-cycle

Company Champion: Steven Lee
Champion Title: Managing Director, Income Security
IP Ownership: Company-Owned

CM:
HT: X
ORIE: X

Samsung Electronics

Company Division/Team: Global Innovation Center

Company Website: samsunggic.com

Company Challenge:
How might we protect industrial iot sensors/hubs from intrusions/breaches?

Domain: Internet of Things

Learning Objectives:
With much excitement around IoT there is trepidation around security. IoT aims to be the connective tissue for building a more connected world. In this opportunity students will look into IoT infosec for the following reasons:
• it is an "unsolved" technical problem. iot info is fundamentally different from traditional intrusion detection in terms of entry points, attack signatures, packet types, architecture (who is the network? who is the host??), etc. geeky problems with real, commercial value.
• iot solutions are closed. closed-sourced software means "deep", exploitable bugs - bugs that will be breached one day by some 16 year old.
• industrial iot is a secular trend. more sensors on expensive stuff. expensive stuff that requires 99.9999% uptime.
• overlooked. iot infosec is not in vogue at the moment. there hasnt been a major breach/intrusion (yet) so it's not top of mind of vc's, cto's, etc. What happens when vulnerable sensors/boards are increasingly used to manage industrial gear?

Students will have the opportunity to work closely with the executive team at Samsung's Global Innovation Center, which includes professionals in every business functions (HR, Legal, Marketing, Finance, M&A and Integration, Investments, Partnerships, CTO, Accelerator, etc.)

Faculty Interest: [Vitaly](#)

Company Champion: Vincent Tang
Champion Title: Lead Machine Learning Engineer
IP Ownership: Company-Owned

CM:
HT:
ORIE:

SAP

Company Division/Team: Next-Gen Lab

Company Website: http://go.sap.com/training-certification/university-alliances.html

Company Challenge:
How might we develop a platform to identify and create connections between SAP corporate users from different industries to improve customers' experiences?

Domain: Ecommerce, FinTech, Internet of Things, Media, Social Entrepreneurship, Social Media, Machine Learning, Deep Learning, Design Thinking, Augmented Reality, Virtual Reality, Data Visualization

Learning Objectives:
Because this challenge gives students the autonomy to design their platform to their liking, the challenge empowers students to selectively learn the technical skills they and companies value most, ranging from machine learning to augmented reality. Plus, because the project focuses on interdisciplinary, team-based innovation, students will practice design thinking, project management, communications, and business-focused disruptive thinking. Students must learn to pair their technical skills with business thinking to work as a team to develop an innovative solution to enable distinct enterprises to innovate seamlessly together.

Company Champion: Sandra Moerch-Petersen
Champion Title: Global Innovation Manager
IP Ownership: Company-Owned

CM:
HT:
ORIE:

Servy

Company Division/Team: Technical

Company Website: http://www.servyapp.com

Company Challenge:
How might we use artificial intelligence and rich contextual data to create a restaurant decision making tool for diners?

Domain: Restaurant Technology, User Experience, Machine Learning, Data Analytics

Learning Objectives:
Students will gain experience in

- Driving increased behavior and delivering contextually relevant information to a growing user base of mobile users

 - Constructing a ready to deploy application of data analytics and machine learning based on rich evaluation data

- Exploring digital communication channels to deliver content and increase user engagement

- Designing an in-app experience and/or marketing collateral to drive user engagement

Company Champion: Julien Wormser
Champion Title: CTO
IP Ownership: Company-Owned

CM:
HT:
ORIE: X

Servy

Company Division/Team: Product

Company Website: http://www.servyapp.com

Company Challenge:
How might we create a new evaluation platform that uses gamification and social motivators to drive restaurant evaluations?

Domain: Social Media, User Experience, Gamification, Restaurant Technology

Learning Objectives:
Students will gain experience in

- Exploring intrinsic and extrinsic drivers for a community of app users

- Implementing a social gamification system in an active mobile application

- Collaborating with a marketing team and app userbase to iterate through concepts

- Designing an in-app experience and marketing collateral to support recommendations

Company Champion: Julien Wormser
Champion Title: CTO
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

Shoals Marine Laboratory

Company Website: www.shoalsmarinelaboratory.org

Company Challenge:
How might we harness the power of a large variety of independent researchers and educators working at Shoals Marine Lab to build a comprehensive spatially-explicit biodiversity information center?

Domain: Internet of Things, Media, Science

Learning Objectives:
How to merge the information derived by a diverse group of independent scientists and educators into one common database for the good of all. Application would span beyond this one place and theme to address how to take advantage of information gathering power of independent agents towards a collective good.

Company Champion: Jennifer Seavey
Champion Title: Executive Director
IP Ownership: Public Domain

CM:
HT:
ORIE:

Sidewalk Labs

Company Website: sidewalklabs.com

Company Challenge:
How might we reduce congestion and improve safety by detecting double-parking in urban environments?

Domain: Urban Technology

Learning Objectives:
Applying computer vision and location detection to real-world environments. Designing and deploying hardware to capture imagery.

Company Champion: Craig Nevill-Manning
Champion Title: CTO
IP Ownership: Public Domain

CM:
HT:
ORIE: X

Simon Data

Company Division/Team: Product

Company Website: simondata.com

Company Challenge:
How might we use data to discover "micro-influencers" who are fanatical about a given company and its products to help product marketers and growth hackers grow their company's user base?

Domain: Ecommerce, Health Tech, Big Data / Data Science

Learning Objectives:
The challenge will require designing a product and system that integrates data from multiple sources: first party company data, social networks, and more. Success will require not only big data, machine learning, and visualization components, but also solving end marketing goals of identifying (and defining) customers that can be considered "micro-influencers".

Company Champion: Jason Davis
Champion Title: CEO
IP Ownership: Student-Owned

CM: X
HT:
ORIE:

The Huffington Post / Aol

Company Division/Team: Analytics

Company Website: www.huffingtonpost.com

Company Challenge:
How might we find the right balance between highly personalized content (e.g. content you see on your Facebook News Feeds based on your own preferences, friends' posts, Pages your subscribed to) and general content (e.g. news articles on cnn.com) that tel

Domain: Media

Learning Objectives:
Determine the value of editorial voice in our highly personalized world

Explore big data's possibilities for driving greater personalization in news experiences.

How the editorial process works

Faculty Interest: [Mor](#)

Company Champion: Vincent Wu
Champion Title: Head of analytics
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

The Museum of Modern Art

Company Division/Team: Digital Content & Strategy

Company Website: moma.org

Company Challenge:
How might we use messaging apps to engage with our visitors, both on- and off-site?

Domain: Social Media,

Learning Objectives:
We're interested in engaging visitors before, during and after visits, as well as people who may never visit MoMA on-site and have a particular interest in using NLP, messaging apps, and bots to solve this. Students should gain a deep understanding of the messaging app ecosystem and how businesses and customers are talking to each other and they should learn to plan a sustainable yet impactful workflow.

Company Champion: Jacqueline Thomas
Champion Title: Department Manager, Digital Media
IP Ownership: Public Domain

CM: X
HT:
ORIE:

The New York Times

Company Division/Team: Technology/CTO

Company Website: http://www.nytimes.com

Company Challenge:
How might we make our news more relevant, welcoming, accessible and valuable to users outside of the United States?

Domain: Media

Learning Objectives:
Students could take many different approaches to this challenge. It asks the question of what does locality mean for media consumption, what granularity is most important, what cultural and practical barriers exist to purchasing, how important are small product cues, how to determine relevancy based on locality, how to craft an international expansion strategy from a business and product perspective, etc.

Faculty Interest: [Tap](Tap)

Company Champion: Nick Rockwell
Champion Title: CTO
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

The New York Times

Company Division/Team: Community

Company Website: http://www.nytimes.com/

Company Challenge:
How might we create a safe place for people of all backgrounds to discuss important local, national and global issues?

Domain: Media

Learning Objectives:
We believe that this is a tremendously important unsolved problem on the internet.

On the technical side, there are opportunities to explore supervised, semi-supervised and fully automatic solutions for community moderation. How can we use technology to help members of a community keep conversations civil and robust? There are also opportunities to learn about web app development, particularly on mobile.

On the business side, there's an opportunity to learn about product development, user testing and design. We're also interested in ways to quantitatively and qualitatively measure and model community engagement.

Faculty Interest: Tap, Mor

Company Champion: Erica Greene
Champion Title: developer on the Newsroom Data Tools team
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

The New York Times

Company Division/Team: News Platforms

Company Website: nytimes.com

Company Challenge:
How might we create a daily news habit for people between the ages of 18-30?

Domain: Media, Social Media,

Learning Objectives:
Understand the challenges faced by news organizations in reaching younger readers, as well as learn about how we measure audience attention and retention, and identify which metrics are most important to track. From a product perspective, we'll also provide insights about how to build habits, and let the students run with their own ideas and insights.

Faculty Interest: Deborah

Company Champion: Steven Mayne
Champion Title: Lead Growth Editor
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Torus Teens

Company Website: torusteens.com

Company Challenge:
How might we get urban teens to explore their interests outside of the classroom?

Domain: Social Entrepreneurship, edtech

Learning Objectives:
Students will be challenged to consider alternative answers to the high school education experience. Our own belief is that the educational experience for 14-18 year olds should consist of exploration of interests, exposure to different environments, and the expansion of personal/professional networks. Students will learn how to challenge their assumptions, narrow their focus, and listen to teenagers.

Discipline-specific learnings might be:

Computer Science: Facilitating inter-personal interactions using technology, designing data collection and interpretation tools, and ensuring appropriate levels of computer security.

Business: Designing sustainable business models for social enterprise, determining best case marketing and communications channels, building virality into the solution.

Information Science: Designing data collection and interpretation tools, mapping data relationships, exploring data usage scenarios and especially how it relates to the science of the individual.

Operations: Defining logistical issues associated with online-to-offline action, process mapping, identification of out-of-the box tools to facilitate concept build.

Legal: Exploring online data privacy and data use laws that relate to individuals under the age of 18. Including: COPPA, HIPAA, SOPIPA, FERPA, PPRA

Faculty Interest: [Tap](#)

Company Champion: Cecilia Foxworthy
Champion Title: C-founder & CEO
IP Ownership: Public Domain

CM: X
HT:
ORIE:

UnitedHealth Group

Company Division/Team: Enterprise Research & Development

Company Website: www.unitedhealthgroup.com/

Company Challenge:
How might we help monitor and communicate with patients, physicians and ultimately caregivers when patients transition from hospital to rehab to home to improve quality of life and reduce mortality?

Domain: Health Tech, Internet of Things

Learning Objectives:
Many patients, particularly the elderly, do NOT do well (have complications, need to be readmitted) after surgical procedures such as hip fracture repair. There are major breakdowns in education (what care patient should be getting after discharge), monitoring (is patient starting to walk etc.) and communication (how to reach the surgeon and other clinicians). These breakdown occur at transitions from hospital to rehabilitation facilities and from rehab to home and carry significant negative cost and care outcomes.

The students will engage with the nation's largest insurer to develop a reimbursable product/service for the growing over 65 population (baby boomers). Students will learn product rapid-cycle iteration for the growing population of individuals 65 years or older. The students will have access to a large company's resources and devices, such as wearables, smart phones, sensors and Amazon echo etc. Students will interact with a variety of internal innovation groups (IT, VC, product) as well as have the potential to collaborate with organizations that support our research and development work. Students can everage wearable devices, sensors, small data and Amazon ECHO

Faculty Interest: Deborah

Company Champion: Kristi Norton
Champion Title: Senior Vice President of Product & Development
IP Ownership: Public Domain

CM:
HT: X
ORIE:

VaynerMedia

Company Division/Team: eCommerce / Smart Technology

Company Website: VaynerMedia.com

Company Challenge:
How might we leverage the Amazon Echo to deliver a truly accessible experience to handicap or impaired people?

Domain: Ecommerce, Health Tech, Internet of Things, Social Media,

Learning Objectives:
1. How to levarage technology to improve the lives of the 57+ million handicap Americans. /

2. Problemsolving using specific technology(ies) in unique ways outside of their commonly used contexts

3. Solving humanity challenge through the use of technology

4. Development of a business + marketing plan to market this newly developed solution.

Faculty Interest: [Deborah](#)

Company Champion: Sabir Semerkant
Champion Title: SVP of eCommerce at VaynerMedia
IP Ownership: Public Domain

CM: X
HT:
ORIE:

Verizon

Company Division/Team: Verizon Open Innovation

Company Website: Www.verizonopeninnovation.com

Company Challenge:
How might we enable consumers to become empowered by their digital identity across mobile devices, IoT systems (wearables, cars, homes), cross platform media, and their online footprint in a way where it (their digital identity) can be used as a tool for

Domain: Internet of Things, Media, Security, Social Media, Telecom and wireless

Learning Objectives:
1) How the intersection of media and IoT is creating new opportunities for personalization and user relevance

2) How assets from the combined Verizon, AOL, and Yahoo entities can create a new platform for engagement

3) How data is only as good as the value and insight it brings to the end user and participants in the value chain

4) How a fortune 15 company can still act like a startup

5) Next gen perspectives on digital media, consumer devices, advertising, and the future of mobility

Faculty Interest: Deborah

Company Champion: Christian Guirnalda
Champion Title: Director Open Innovation
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Verizon

Company Division/Team: Labs

Company Website: verizon.com

Company Challenge:
How might we enable consumers to enrich their lives by using augmented or mixed reality to surface relevant information while on the go?

Domain: Ecommerce, Internet of Things, Media, Security, Social Media,

Learning Objectives:
An understanding of how vast data creation can be put to personalized use for the individual or community

How platform level development can apply to multiple use cases across segments

How the ability to drive platform level growth can stem from a single strong base case

An understanding of emerging AR/MR trends and technologies

How the combination of Verizon companies: Verizon, AOL, FiOS, and now Yahoo can come together to deliver these experiences

Faculty Interest: [Mor](#)

Company Champion: Christian Guirnalda
Champion Title: Director Open Innovation
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

Verizon

Company Division/Team: Technology

Company Website: Verizon.com

Company Challenge:
How might we use Verizon network data to help governments and enterprises discover and respond to civic problems?

Domain: Internet of Things, Security, Network and information technology

Learning Objectives:
Students will learn to develop ways to employ data to solve day to day problems. Verizon's networks generate vast amounts of data as part of customer use and this data can be employed to solve customer's real world problems. This challenge encourages students to think openly and creatively to find uses for this data to solve consumers and enterprise's problems. Students will be exposed to analytics techniques using machine learning and artificial intelligence, will be driven to develop disruptive solutions using ubiquitous network data and create business plans/cases to identify sustainable business models using the data. Verizon's networks generate large amounts of data that can be customer agnostic and cover the aspects of network usage based on geography, time, user location, content etc. Our interest is in finding orthogonal use of this data. There have been many examples of using this data for marketing purposes. We are interested in finding other uses that can help consumers, cities, governments and others to improve their own activities. Below are couple of examples of such usage to provide guidance of our thinking.

• Network data can assist the city administrators by pin pointing that users are breaking at certain locations during their drives and thus identifying road problems such as pot holes in those locations. City administrators are able to use this data to discover issues much faster and at much lower cost

• Network data can be shared with enterprises to provide them additional ways to authenticate their users by looking information such as their current location, activity etc.

• Identify emerging hotspots through rapid increase in use of certain network data in certain locations and share them with interested groups"

Company Champion: Srinivasa Kalapala
Champion Title: Executive Director
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

Verizon/AOL

Company Division/Team: Moviefone

Company Website: www.moviefone.com

Company Challenge:
How might we build a Moviefone-branded chat-bot service?

Domain: Ecommerce, Media, Social Media,

Learning Objectives:
All things about building and distributing chat bots. Moreover, given that the brand we are working with is Moviefone, the other thing students will learn about is the movie business and generating movie ticket sales.

Faculty Interest: Ron Brachman

Company Champion: David Burrick
Champion Title: General Manager, Moviefone and Autoblog
IP Ownership: Company-Owned

CM: X
HT:
ORIE:

WATTx

Company Website: http://www.wattx.io/

Company Challenge:
How might we in the case of a fire, improve communication and localization of emergency responders in the building without interfering with human instinct and trained behavior?

Domain: Internet of Things, Emergency management

Learning Objectives:
Working on this Company Challenge, students will spend time understanding the value of human instincts and learned-behavior of firefighters in emergency response situations, as well as their limitations. From this students will build a technology that enhances the capabilities of firefighters without interfering with their human response, e.g. flexibility and mobility. The Challenge affords students unique opportunity to learn about weighing the benefits of human input with additional augmented suggestions.

Students will learn how to create technology to improve capabilities for a sector that currently relies on rudimentary resources; work within an environment that is constrained in many dimensions (time, resources, data bandwidth etc.); implement human-centered design that is sensitive to an environment that relies heavily on the human sensing abilities of the users; employ user testing for robust technology that applies to time-sensitive and life-threatening situations; build business models that appeal to public sector clients; understand legal requirements for emergency response personnel and protocols.

Despite the cross-Atlantic nature of this Challenge relationship, in-person working sessions with Bastian Bergmann, the CEO of WATTx in Berlin, will be conducted in NYC in late September, late October, and early November. These are in addition to more frequent virtual working sessions throughout the semester. Bastian will also be in NYC for the final presentation.

Furthermore, Bastian and the WATTx team would look forward to working with students beyond this semester-long challenge. We are eager to support this team in continuing to build out the product prototype and MVP, and explore the opportunity to startup a company for the product.

Company Champion: Bastian Bergmann
Champion Title: CEO
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X

WebMD

Company Website: www.webmd.com

Company Challenge:
How might we make booking a doctor's appointment as easy as hailing an Uber?

Domain: Ecommerce, Health Tech

Learning Objectives:
Even in these primitive days of 2016 - years before The Singularity and the Robot Revolution - there are some digital comforts that humans have grown to depend on: Even in 2016, we would would never think of picking up a telephone to talk to a human airline representative in order to purchase a plane ticket. We would never think of picking up a telephone to order a taxi, or even to order a food delivery from our favorite restaurants; so why is it that in 2016, we still pick up the phone to make a doctor's appointment?

While the problem of ubiquitous online appointment booking is comprised of facets from a variety of domains, one significant hurdle is purely technological: the fragmented landscape of hospital and backoffice booking systems is so varied and incompatible that interoperability has remained a pipe dream. While various organization have proposed solutions, each one depends on a blockade that has largely proved to be a showstopper: the requirement that hospitals and private physician practices perform work - largely at their own expense - in order to adopt these new standards.

Your challenge, should you wish to accept it, is to create a mechanism which will allow patients to schedule appointments with any physician, regardless of that physicians' internal appointment booking/scheduling system.

This isn't merely about creating an API that can be implemented in order to confirm to a new standardized scheduling interface - this is about creating a system that allows physicians to keep using their current appointment systems, yet provide an online scheduling interface to patients , *without* having to do custom development/modify the scheduling systems that doctor's offices currently use today.

Hey, if it was easy, someone would already have done it :) Looking forward to seeing what you come up with!

Faculty Interest: Deborah

Company Champion: Ben Greenberg
Champion Title: VP of Mobile Products and User Experience
IP Ownership: Company-Owned

CM:
HT: X
ORIE: X

Weight Watchers

Company Division/Team: Digital Product Engineering

Company Website: www.weightwatchers.com

Company Challenge:
How might we use gamification to attract new member audiences to Weight Watchers whilst helping people achieve their weight loss goals?

Domain: Health Tech

Learning Objectives:
The goal of this challenge is to expose you to the processes that we go through as we try to solve complex business problems. Putting our members needs first, you will use Lean and Agile techniques such as discovery, research, hypotheses validation, prototyping and building a working solution to gain exposure to how we work. The best part is the Weight Watchers team will help and guide you, but will allow you the autonomy needed to develop a successful solution as you learn along the way.

Company Champion: Michael Lysaght
Champion Title: SVP Digital Product Engineering
IP Ownership:

CM:
HT: X
ORIE:

x.ai

Company Division/Team: Technology

Company Website: https://x.ai

Company Challenge:
How might young professionals, who aren't far enough along in their careers to be assigned a human assistant, interact with artificial intelligence powered personal assistants?

Domain: artificial intelligence

Learning Objectives:
Students will be challenged to think through new ways for users to interact with a new interface, AI Agents. It is a new field to define ways to acquire, on-board, and engage users given the constraints of current state of machine learning and natural language processing technologies.

Faculty Interest: Ron Brachman

Company Champion: Alex Poon
Champion Title: Founder & COO
IP Ownership: Company-Owned

CM: X
HT:
ORIE: X