# ALISON SHIKADA

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## OBJECTIVE

Seeking an engineering or computer related internship to gain experience in the workforce

## EDUCATION

**UNIVERSITY OF ILLINOIS** — Urbana-Champaign, IL
***Bachelor of Science in Computer Engineering*** — May 2020

| | | |
|---|---|---|
| ECE 120 | MATH 231 | GPA: --/4.0 |
| ENG 100 | CHEM 102 | |

**PRESENTATION HIGH SCHOOL** — San Jose, CA
GPA: 4.46/5.00

## EXPERIENCE

**NIKE GOLF CAMPS** — Mountain View, CA
***Golf Instructor*** — Summer 2016

- Guided campers by teaching golf technique and etiquette while encouraging fun
- Delegated instruction rotations and lunchtime tasks evenly amongst workers
- Communicated between parents, kids, and other staff regarding safety and conflicts
- Supervised up to 8 children ages 7-17 while in practice facilities and on the course

## LEADERSHIP

**JR. YOUTH BUDDHIST ASSOCIATION (Jr. YBA)** — San Jose, CA
***District Treasurer, Chapter Secretary, Chapter Religious Chair, Chapter Co-Community Service Chair, Chapter Co-Activities Chair*** — 2011 - 2016

- Organized social events including BBQs, sleepovers, trips to LA, and other activities with 58 members and 10 cabinet members
- Participated in a committee to plan, organize, and execute a regional conference centered around Buddhism and tying it into modern culture
- Collaborated with other cabinet members to solidify a yearly budget with minimal advisor/parental input

**Student Government**
***Homeroom Representative***

- Aided other representatives in coordinating food drives, toy drives, penny drives, class celebrations, etc.
- Read announcements, handed out flyers, and asked for input from the homeroom participants
- Contributed to the Campus Improvement Committee by volunteering at activities and creating new events

## HONORS

| | |
|---|---|
| Magna Cum Laude, Presentation High School | 2016 |
| Most Inspirational Award, Varsity Swim Team, Presentation High School | 2016 |
| Coach's Award, Varsity Golf Team, Presentation High School | 2015 |
| Silver Award and Bronze Award, Girl Scouts of Northern California | 2010, 2013 |

## ACTIVITIES

| | |
|---|---|
| Ambassador Girl Scout, Girl Scouts of Northern California | 2005- 2016 |
| Mathematics Peer Tutor, Presentation High School | 2012-2016 |
| Bella Voce Auditioned Women's Chorale, Presentation High School | 2013-2016 |
| Buddhist Studies 4th Grade Sunday School Teacher | 2014-2016 |
| Fashion Show Designer/Model, Presentation High School/Bellarmine College Preparatory | 2014, 2015- 2016 |
| Nicaragua Social Justice Immersion Trip | Summer 2015 |
| Takahashi Youth Ambassador Fellowship Program | 2014-2015 |

# *Amanda J Beck*

ajbeck3@illinois.edu 920-284-4076 **linkedin.com/in/ajbeck**

## *EDUCATION*

**University of Illinois – Urbana Champaign** Expected graduation: May 2017
Bachelor of Science in Electrical Engineering GPA 3.6/4.0

**Normandale Community College** September 2012- May 2014
Associate of Science in Engineering Foundations GPA 3.8/4.0

## *EXPERIENCE*

***New Business Intern*** June 2016 – August 2016
ComEd Chicago, IL
- Automated weekly reports with VBA in Excel to organize report data and query online databases, from both internal and external sources, to compile a review sheet of three months-worth of project statuses
- Programmed a dynamic checklist to reference transformer and switchgear pad specifications, which produced a printable document for use on-site to verify the correct layout and installation of foundations
-Worked closely with projects designers to lay out AutoCAD designs for change-of-service distribution projects and assisted in defining scope of work documentation

***Spring Co-op*** January 2016 – May 2016
GE, Grid Solutions LLC akbrook Terrace, IL
- Developed the CAD library of 3D models to integrate with schematic symbols for substation controls design
-Created a standard procedure for translating 3D cabinet panels to a 2D format for milling
- Programmed a tool to calculate foundation size when given structure placement and environment specifications
- Investigated the current process and helped identify inconsistencies in project management procedures in labor forecasting

***Tutor*** January 2014 – May 2014
Normandale Community College Bloomington, MN
- Provided assistance to students in the subjects of math, physics, and computer science
- Improved the performance of physics student by a letter grade

***IT Student Worker*** February 2013 – January 2014
Normandale Community College Bloomington, MN
- Fielded questions from students, instructors and staff regarding the technology available on campus, including troubleshooting and general information on PCs, networks, software, etc. either through walk-ins or calls to the IT hotline
- Worked with the database system RightNow to create tickets for each incident and trying to fix the issue independently or pass it on to the correct IT staffer

## *VOLUNTEER*

***Research Mentee*** September 2014 – December 2014
Promoting Undergraduate Research in Engineering (PURE) Urbana, IL
- Worked under a graduate student to build a program for accessing power grid information through context based analysis using C++

***Design Lab Volunteer*** June 2014 – August 2014
The Works Bloomington, MN
- Assisted families and young children in running various experiments while teaching about the physical principles explored with each lab and the engineering design process

## *SKILLS*

***Familiar:*** C++, MATLAB, AutoCAD, PowerWorld, NI Multisim, PSpice, RightNow
***Sophisticated:*** VBA, C, Office Suite, Bentley Substation, CRM

# ANKU ADHIKARI

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## Education

**PhD in Computer Science** August 2016 - Present
University of Illinois at Urbana-Champaign, United States

**MS in Electrical & Computer Engineering** January 2013 - December 2015
University of Illinois at Urbana-Champaign, United States. (CGPA 3.61)

**B.Eng, Electrical & Electronics Engineering (Communication)** August 2003 - September 2007
Kathmandu University, Nepal *(Among top 10 in cohort, equivalent to High Honor)*

## Experience

**Graduate Research Assistant** August 2016 - Present
*Information Trust Institute (ITI), University of Illinois at Urbana-Champaign*

- Performing research and collaborating with university faculty to support research activities by conducting experiments, organizing/analyzing data and publishing research results.

**AUIP Scholar Attachment & Research Assistant** January 2016 - July 2016
*Advanced Digital Sciences Center (ADSC), Illinois in Singapore*

- Designed secure IoT sensors and demonstrated audio based side-channel attacks for manufacturing

**Software Engineer - Smart Grid Group** September 2012 - December 2012
*Advanced Digital Sciences Center (ADSC), Illinois in Singapore*

- Researched on security protocols to support reliable, efficient, adaptive and low cost communication for Cognitive Radio Networks

**Research Engineer, Embedded Systems Department** March 2008 - June 2012
*Institute for Infocomm Research, Agency for Science, Technology and Research (A*STAR), Singapore*

- Designed and developed IEEE-compliant chipset for high speed millimeter-wave based communication for next-generation gigabit transfers. First version had highest compatibility rates in inaugural WiGig PlugFest in November 2011
- Designed and developed next generation IP-based connectivity solution with prototype based on WiMedia UWB technology

## Technical Disclosure & Publications

- A. Hojjati, A. Adhikari, K. Struckmann, E. J. Chou, T. Nguyen, K. Madan, M. Winslett, C. Gunter, W. P. King, *Leave Your Phone at the Door: Side Channels that Reveal Factory Floor Secrets*, 23rd ACM SIGSAC Conference on Computer and Communications Security (CCS), ACM, Vienna, Austria, 2016 (Accepted).
- A. Adhikari, A. Hojjati, J. Shen, J. T. Hsu, W. P. King and M. Winslett, *Trust Issues for Big Data about High-Value Manufactured Parts*, 2016 IEEE 2nd International Conference on Big Data Security on Cloud (BigDataSecurity), IEEE International Conference on High Performance and Smart Computing (HPSC), and IEEE International Conference on Intelligent Data and Security (IDS), New York, NY, USA, 2016, pp. 24-29.
- A. Adhikari, (2015), *Video-analysis Inference Automated ECG (VID-ECG): Improving Video-based Heart Rate Detection and Exposing Security Risks of ECG-based Biometric Authentication* (Master's thesis). University of Illinois at Urbana-Champaign, IL, USA.
- R. J. Jayabal, S.Y. Law, A. Adhikari, B. Jin, J. Chen, $I^2R$ Disclosure 2010109, *A Hardware Rate Adaptation Implementation and Control Interface for Very High Speed Wireless Communications,* 2011.
- A. Adhikari, *ICT Programmes for Decentralization and Development,* ITU Telecom ICT Book for the Youth Forum, pp.351-352, Dec 2006.

## Honors & Achievements

**A*STAR Graduate Scholarship,** Agency for Science, Techonology and Research 2013 - Present
**Sponsorship,** Qualcomm EmpowHERment Summit 2015
**Scholarship,** Computing Research Association-Women (CRA-W) Grad Cohort Workshop 2015
**Selected Participant,** Women Empowered in STEM conference (weSTEM) 2013
**$I^2R$ Good Team Player Award,** Institute for Infocomm Research ($I^2R$) 2009, 2011 & 2012

**ITU Telecom Fellowship,** ITU Youth Forum *(Only 1 female selected nationally)* 2006
**President,** Society of Electrical and Electronics Engineers (SEEE) *(1st female student president)* 2006

## Major Research & Development Projects

**Side-Channel Vulnerabilities in Manufacturing Environments** April 2016 - Present
**Under a CIRI - UIUC project funded by Department of Homeland Security**

- Built an interactive framework for reconstruction, based on audio and magnetometer signal processing
- Demonstrated side-channel attack using mobile phone to successfully reconstruct objects being manufactured using just the recorded audio and magnetometer information
- Reconstruction results demonstrating this side-channel vulnerability that leaks factory floor secrets has been accepted for publication in ACM CCS 2016

**Enabling Manufacturing BigData using Secure and Robust IoT Sensors** July 2015 - Present
**Under a CIRI - UIUC project funded by Department of Homeland Security**

- Developing a robust secure IoT sensor network for supporting secure data extraction from factory machines
- Data extracted from sensors will be sent to the cloud for storage as digital thread, serving as BigData for manufacturing
- Position paper on securing digital threads for future of manufacturing published in IEEE BigDataSecurity 2016

**Video-analysis Inference automateD ECG (VID-ECG)** January 2013 - December 2015
**M.S. Thesis Project, University of Illinois, Urbana-Champaign**

- Designed and implemented a non-contact based pulse extraction system using video processing, signal processing and bioinstrumentation methods.

**ReCognize: Reliable Cognitive Radio for Smart Grid** September 2012 - December 2012

- Designed a basic system model for efficient protection against major attacks and to support a security protocol in Cognitive Radio based future Smart Grid networks.

**60GHz Chipset Development A*STAR Flagship Project** September 2009 - June 2012
**Collaboration of A*Star Exploit Technologies and NTU**

- Developed a prototype for an IEEE-compliant chipset for next generation millimeter-wave based WPANs.

**Robust Mesh Enabled WiMedia Network Project** March 2008 - September 2009
**A*STAR Towards Gigabit Personal Connectivity Program**

- Developed a generic and standalone IP connectivity solution based on WiMedia Link Layer.

**The Study and Design of Mobile Ad Hoc Networks** August 2006 - August 2007
**Undergraduate Thesis Project, Kathmandu University**

- Performed performance evaluation of real-time ad hoc and hybrid networks in varying mobility and network size conditions.

## Other Projects

**CoBuy: Share the Deal and Save Your Money** January 2014 - August 2014
**iOS prototype demonstrated in the Computer Science department open-house sessions in May 2014**

- Designed a mobile application prototype that combines concepts of social-networking cum e-commerce website under a single platform.

**Cognitive Optical Character Recognition System** August 2005 - August 2006
**Selected for presentation at Kathmandu University Project Exhibition (KUPEX)**

- Implemented an innovative OCR system combining image processing with neural networks based training algorithms for progressive learning, faster processing and finer accuracy in character recognition.

## Skills

**Expert :** C, Python, MATLAB, ModelSim, Raspberry Pi, Arduino, svn, LaTeX
**Intermediate :** MySQL, VHDL, HTML, CSS, R, Ruby on Rails, Linux (Ubuntu, Fedora, CentOS, Raspian)
**Basic :** C++, Keil Development Tool, Xilinx ISE Design Suite, LabView, Telelogic Rhapsody

## Professional Affiliations

Advanced Digital Sciences Center - Research Affiliate
Society of Women Engineers (SWE) - C2C Member
Nepal Engineering Council - Member
ITU Telecom- Alumni Youth Fellow
A*STAR Graduate Academy Singapore - Scholar
Women in Electrical and Computer Engineering,UIUC
Women in Computer Science, UIUC
Human Network (ITU Telecom) - Member

# Ann H. Thomas

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## Education

**University of Illinois at Urbana-Champaign** — May 2019
Bachelor of Science, Computer Engineering — GPA: 3.69/4.00
James Scholar

**Thomas Jefferson High School for Science and Technology (TJHSST)** — June 2015
Alexandria, Virginia — GPA: 4.36/4.00

## Experience

**Electrical and Computer Engineering Department** — Undergraduate Course Aid
Introduction to Electronics Course — Fall 2016

- Assisted 30 students in a weekly circuit-building laboratory session
- Ran student feedback committee to improve class

**Naval Surface Warfare Center** — Intern
Structural Acoustics and Target Strength Branch — May-August 2016

- Converted FORTRAN code into updated Java
- Verified consistency of 41 components across FORTRAN and Java
- Added documentation of technical components to graphical user interface

**Naval Research Laboratory** — Intern
Advanced Radar Systems Department — June-August 2014

- Tested radar equipment and completed data analysis
- Designed and implemented phase-shift keying modulated signal option
- Updated radar system graphical user interface

## Leadership and Activities

**iRobotics Executive Board** — Corporate Director 2016-Present

- Coordinated technical information sessions with sponsoring companies
- Ensured all teams and projects received funding for competition and outreach

**iRobotics Midwestern Robotics Design Competition Transfarmers Team** — Electrical Lead, Treasurer 2015-Present

- Designed and ran electronics workshops for new members
- Created and implemented designs for all electronics systems
- Applied for and budgeted team funding

**Society of Women Engineers at Illinois** — Committee Chair 2016-Present

- Chair on Membership Enrichment Committee
- Planned monthly events and talks for members

**Women in Engineering Orientation** — Mentor Fall 2016

- Provided support for freshman women in Computer Engineering

## Honors

SpaceX Women in Engineering Scholarship inaugural winner — 2015
Society of Women Engineers Illinois Chapter Scholarship winner — 2016
Rockwell Automation Scholarship winner — 2016
John Deere "Run with the Best" Scholarship winner — 2015
University of Illinois Dean's List — Fall 2015

## Skills and Coursework

**Software:** Autodesk Inventor, Microsoft Office, EagleCAD, Mentor Graphics, Photoshop (basic)
**Programming Languages**: C, Java (basic), MATLAB (basic)
**Technical Experience:** Arduino, Linux, Subversion, Command Line, Circuit Analysis (oscilloscopes, multimeters), Analog and Digital Sensors, 3D Printing, Laser Cutting
**Illinois Coursework:** Introduction to Computing, Introduction to Circuits, Computer Systems and Programming, Differential Equations with Linear Topics, Data Structures (In Progress), Discrete Structures (In Progress)
**TJHSST Coursework:** Automation and Robotics, Analog and Digital Electronics, Microprocessor Systems, Prototyping and Development, Robotics Senior Research, Linear Algebra

# Anushrav Vatsa

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## Education

***University of Illinois Urbana-Champaign*** *August 2016*
Intended Major: Computer Engineering
Coursework: Calculus, Intro to Computing, Theatre

***Bharatiya Vidya Bhavan's Mehta Vidyalaya, New Delhi*** *May 2016*
Head Boy and leader for Student Council *GPA 3.52*
President - Techedge (Computer Club)
Secretary General at JEMS (MUN Society)
Editor School Year Book

## Experience

### BS Techsoft
*Sales and Customer Service*
Handled on site troubleshooting and set ups (systems and networks) for offices and home use. Worked with MAC OS, Windows and Linux systems.

### Techedge
*Computer Club President*
Participated as a member and headed the club as a senior at high school, organizing events and doing large scale computer system setups for events.

### Arthala
*Computer Instructor*
Taught basic computer skills to people in a rural establishment.

## Projects

### Kissan Konnect
(Recognized as the 2014 IT Innovation Project of the Year by **University of Technology Sydney**)
*Project Lead*
Developed a mobile/web service is to improve agriculture by enabling farmers in India to connect to consumers, agricultural communities and government resources to be more efficient and have a sustainable farming environment.

## Skills

- Well experienced with the Adobe CC package (Photoshop, Premier Pro, After Effects, and Audition), Sony Vegas Pro. Proficient in still graphic designing, video/audio editing and enhancement.
- Expertise in Microsoft Office Package.
- Skilled in C++ and C. Programming experience in Python, MySQL, JavaScript and PHP.
- Well rounded sales skills and good background in dealing with customer.

# Ariel Pershman

Current: 1012 W. Illinois St., Wardall Hall 0221B, Urbana, IL, 61801
Permanent: N54W16623 Ravenwood Dr., Menomonee Falls, WI, 53051

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pershma2@illinois.edu

## Education

**University of Illinois at Urbana-Champaign / Electrical Engineering**
August 2015 - PRESENT, Urbana, IL

**Hamilton High School**
September 2011 - June 2015, Sussex, WI
GPA 3.73/4.0

## Activities

**Association for Computing Machinery-SIGPWNY /** Active Member, CTF Competitor, Co-Leader of CTF Focus Group
September 2015 - PRESENT, Urbana, IL

- Learn cyber security techniques, and apply those techniques to Capture the Flag (CTF) competitions.
- Retrieved two flags for our team, helping our team place 14th and qualify for finals in CSAW 2015.
- Announce CTFs of the week and coach new people on CTF.

**Society of Women Engineers/** Outreach, National Center for Women and Information Technology (NCWIT) Outreach
September 2015 - PRESENT, Urbana, IL

- Participate in outreach activities to encourage more women to become engineers and scientists.
- Promote the existence of the NCWIT award to potential female award applicants.

**FIRST Robotics Team 537 /** Web Design Lead
September 2012- February 2014, Sussex, WI

- Updated a weekly segment on the wordpress based website based on my local high school robotics team.
- Participated in the Electrical and C++ coding components of building the robot.

## Skills

Advanced: HTML, CSS, Soldering, Oscilloscope, Ammeter, Voltmeter, Function Generator

Moderate: Debian, command line, CTF

Minimal: Wireshark, Nmap, C, C++, Mandarin, Russian, Owasp ZAP, Burpsuite, Reverse Engineering, Intel x86, IDA Pro, GDB

## Awards

NCWIT State Award Winner Wisconsin 2014

2016 Recipient of a BlackhatUSA Student Scholarship

QUALCOMM ENG 100 Student Design Competition 2015 Second Place Winners

# Brianna Szczesuil

33614 Winnebago Ct. Wildwood, IL, 60030-847.691.0989-Briannaskye@msn.com

## EDUCATION

**College of Lake County** Grayslake, IL
***Assoc., Engineering Science,*** December 2016
**University of Illinois** Urbana-Champaign, IL
***B.S., Electrical Engineering***, May 2018

***Related Coursework***

| | |
|---|---|
| Engineering Graphics | Analog Signal Processing |
| Programming for Engineers | Introduction to Computing |
| Introduction to Circuit Analysis | |

## WORK EXPERIENCE

**Assistant Manager, Kumon Math and Reading Center**-Gurnee, IL **(2012-2016)**
- Created lesson plans based on each individual child's abilities
- Generated progress charts based on data gathered from each student
- Compiled statistical reports on tuition payments, orders, and score sheets

**Waitress, Shoreacres Country Club**-Lake Bluff, IL **(2012-present)**
- Train new employees on restaurant protocols to ensure a consistent positive experience for members
- Make well informed decisions when managers are not present
- Assisted manager with recording inventory and creating charts to track this data

**Membership Services, Fitnation**-Gurnee, IL **(2016-present)**
- Handled consultations for inquiring members with the goal in mind to "sell" the membership
- Recorded payment information within the point of sale system
- Stayed up to date on new policies and specials in order to provide well informed advice

## VOLUNTEER EXPERIENCE

***Illinois Food Bank*** Waukegan, IL
- Packaged nonperishable food, clothing, toys, and other donated items
- Made connections with people in the community who also were volunteering
- During Christmas break, wrapped toys and clothes with wrapping paper instead of putting it straight in the boxes

***Sunrise Home for Senior Living*** Gurnee, IL
- Brainstormed fun activities to do with the seniors living there including: movie on the lawn, dancing/exercise routines, and lunch with families
- Listened and talked with people suffering from dementia and Alzheimer's
- Helped transport and supervise field trips including attending the Gurnee Day's Parade and going to a local farm.

## SKILLS/HONORS

***Languages:*** Java, C
***Software:*** AutoCad, Inventor, Pspice, LINUX
***Honors:*** College Honors List for Academic Excellence (Fall 2014- Spring 2016)

## ACTIVITIES

Member of Engineering Pathways, CLC/UIUC, 2014-2016
Member of the Math Club, CLC, 2014-2016
Member of the Engineering Club, CLC 2014-2016
Member of Engineering Outreach Society, UIUC 2016
Member of WECE, UIUC 2016

# KARUNYA TOTA

**Github**: kaytota **Website:** karunyatota.co
**LinkedIn**: karunyatota **Email:** tota2@illinois.edu

## EDUCATION

**University of Illinois at Urbana Champaign** **Aug 2014 – Dec 2017**
*B.S. Computer Science (Engineering)* **GPA: 3.65/4.0**
James Scholar Honors Program, Dean's List (2014-2015), John Deere & Company Scholar

**Undergraduate Coursework:**
*Completed*: Data Structures, Discrete Structures, Research – Web, Design, & Data, Computer Architecture, Systems Programming, Database Management Systems, Numerical Methods, Algorithms & Theory of Computation
*In Progress*: Art & Science of Web Programming, Data Mining, Social Information Networks

## EXPERIENCE

**Goldman Sachs,** Corporate Services Technology **Jun 2016 – Aug 2016**
*Summer Technology Analyst* **Jersey City, NJ**
- Collaborated on two individual projects for the Human Capital Management Tech space for a course of 10 weeks.
- Overall combined skillset involved constructing a data model, generating RESTful web services, and creating web applications to connect to these services.
- The first project consisted of building a data request automation tool using business process modeling (BPMN) and an internal forms designer application. The second project consisted of constructing a web portal with AngularJS and Bootstrap while generating backend web services using in-house frameworks.

**Caterpillar Inc,** Computer Vision Team **Aug 2015 – Jan 2016**
*Information Analytics Practicum* **Champaign Simulation Center, Research Park**
- Developed a simple web application to serve as a point selection tool to assist workers in capturing measurements on construction vehicles by uploading images of them and selecting points. Back-End capabilities and Data Model were created using Django and basic front-end features were created using Javascript and HTML.

**University of Central Florida,** NSF REU Program **May 2015 – Aug 2015**
*Undergraduate Researcher* **Center for Research in Computer Vision**
- Collaborated on a NSF sponsored REU project entitled 'Counting in Dense Crowds via Deep Learning'.
- Trained a Support Vector Machine classifier with features extracted from a pre-trained convolutional neural network (CNN) and fisher vectors on the UCF annotated dataset of dense crowds. Main technologies included Matlab and MathConvNet toolkit. (Portfolio link: http://crcv.ucf.edu/REU/2015/Tota/)
- Presented research posters to UCF Computer Vision Graduate Program, Lockheed Martin, and Harris Corporation.

## PROJECTS

**CrunchDoor,** Database Management Systems
A Django-based web application that integrates the features of GlassDoor and CrunchBase (using their public APIs) to create a more comprehensive job search tool for students targeting the San Francisco area tech industry.

**Text Editor,** Systems Programming
A simple C based command line text editor allowing users to create and save text files. Other features: displaying the contents of a file, appending and deleting text from a specified line, and searching the file to display the matching query and line number.

## CAMPUS INVOLVEMENT & LEADERSHIP

- **Grace Hopper Conference 2016 Attendee,** CS @ ILLINOIS Scholarship
- **Start @ a Startup NYC Conference 2016 Attendee,** Business Today & Sequoia Capital Scholarship
- **Wolfram Research Campus Ambassador,** CS @ SAIL Instructor, HackIllinois Booth Representative
- **Women in Computer Science,** Active Member, Student Banquet Attendee (2015, 2016)
- **ACM Corporate Committee 2015,** Corporate Sponsor Connection, Tech Talk Host

## TECHNICAL SKILLS

**Languages**: C++, C, Python, Java, Matlab, HTML5, CSS
**Frameworks**: AngularJS, Django
**Other**: Business Process Modeling Notation, Adobe Photoshop

# Katherine Chung

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## Education:

**University of Illinois at Urbana Champaign** **Aug 2015 – May 2019**

- Computer Engineering (3.89 / 4.0)

**Related Coursework:**

- CS 173: Discrete Structures
- CS 225: Data Structures
- ECE 220: Computer Systems & Programming
- MATH 415: Applied Linear Algebra

## Skills:

**Computer**: C, C++, Java, Python, HTML, Labview, Audacity
**Languages**: Mandarin, Cantonese

## Projects:

**SWE Point System** (Google Script/Javascript) **August 2016 - Present**

- Programmed an automated system that uses prompt/response to get event information and point value from user to automatically update member points
- Wrote a program that goes through all lists and adds missing names to the master list

**SFML Game** (C++) **June 2016 - Present**

- Used SFML library to create own derived sprite classes and construct a basic game

**File Sorter** (Java) **July 2016**

- Goes through all files in specific folder and sorts them by keyword and file type and creates new folder

## Leadership:

**Society of Women Engineers:**

**Information Director** **May 2016 – Present**

- Co-lead Information and Marketing committee meetings
- Oversee responsibilities for Information committee members
- Create weekly SWE newsletter
- Re-programmed the online member point system

**EVP Leadership Series Committee Chair** **Aug 2015 – May 2016**

- Organized general meetings and corporate talks with external vice president
- Acted as a liaison between companies and the organization during events
- Created new business card, corporate card, and banner designs

## Work Experience

**Receptionist at Midwest Badminton Club** **June 2015 – Jan 2016**

- Scheduled badminton training for all students Naperville, IL
- Collected payments, managed the shop, opened and closed the gym

**Shadow at Allstate® Company Job Shadow**; **Jan 2016**

- Conversed with employees about leadership and career opportunities Northbrook, IL
- Toured facility and learned about the diverse job types in a Fortune 100 company

## Honors and Awards:

UIUC Dean's List **2016**
Edmund J. James Scholar **2015 – 2016**
ECE Pulse "Amazing Race" 1st Place Winner **2016**

# Meredith Mottonen

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**(847) 707-6157 • meredith@mottonen.org**

## Education

**University of Illinois at Urbana-Champaign** **Expected Graduation: May 2018**
Bachelor of Science in Computer Engineering Cumulative GPA 3.11/4.00

- Minor in Business

**William Fremd High School** **Graduation: June 2014**
Cumulative GPA 4.65/4.00

## Experience

**ComEd Substation Engineering Intern** **Summer 2016**

- Implemented a newly designed protocol to standardize how battery calculations are completed
- Analyzed substation one line diagrams to prioritize power upgrades based on auxiliary power transformer placement
- Self-taught Swift programming language and wrote an application for iOS devices for employee and contractor use
- Designed application to feature various engineering standards, calculation tools and substation navigation

**Nanny** **Fall 2015, Summer 2013-2015, Spring 2014**

- Cared for two elementary-aged children after classes last fall and for three children under the age of seven last summer
- Organized daily schedules for each child while consistently maintaining a playful, patient and compassionate attitude

**Kids Korner Kamp Co-Founder** **Summer 2009-2014**

- Created a business to satisfy the common need for children socialization and entertainment during school vacations
- Increased attendance by 500% to camp session restrictions of 25 children over the course of 4 years
- Prepared themed daily lesson plans, maintained websites and hired extra counselors for weeks of high attendance

## Activities

**Kappa Alpha Theta Sorority** **Fall 2014 – Present**

- Attend weekly chapter meetings and assist in planning, marketing and running chapter's philanthropy fundraisers
- Participate in community service, support charity functions and tutor younger members of the chapter

**Women in Electrical and Computer Engineering** **Fall 2014 – Present**
Social Committee

- Plan exciting social events to bring together various engineering organizations on campus

**Society of Women Engineers**
Outreach Committee **Fall 2014 – Present**

- Work with local schools to interest young children, especially girls, in the STEM fields

## Skills

- Learning: I learn new technologies and new problems quickly
- Communication: I have strong verbal and written communication skills, exercised both with peers and employers
- Computer:
    - Microsoft Office
    - Language: C, C++, Swift

## Awards

- James Scholar (2014-2015)
- William Fremd High School High Honor Roll (Fall 2010 – June 2014)
- Academic Scholar
- Illinois State Scholar
- AP Scholar with Distinction

# Mrunmayi Deshmukh

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mdeshmu2@illinois.edu, 217-819-1358, Visa status - F1

## Education and Coursework

University of Illinois at Urbana-Champaign **May 2018**
Bachelor of Science in Electrical Engineering **GPA: 3.68**

**Honors**

Chancellor's Scholar, UIUC Campus Honors Program Fall '14 – present
James Scholar, UIUC Fall '14 – present
Academic standing: Dean's list Spring '15 & Fall '14

**Relevant Coursework** : ECE 310 (Digital Signal Processing), ECE 330 (Power Circuits), ECE 311 (DSP lab), CS 225 (Data Structures), ECE 329 (Fields and Waves), ECE 342 (Electronic Circuits), ECE 210 (Analog Signal Processing), ECE 220 (Computer systems and Programming)
*Spring 2017 : ECE 385 (Digital Systems Laboratory), ECE 340 (Semiconductor Electronics)*

## Work Experience

**MICROSOFT CORPORATION, DUBAI | MARKETING INTERN** **Summer '16**

- Created and designed marketing plan for Surface Pro 4 for fiscal year 2016-17
- Project lead for Microsoft competitions in education department
- Project lead for Microsoft-Uber collaboration (Marketing – general consumers)

**ZOOMLUX LIGHTING LLC, DUBAI | TECHNICAL INTERN** **Summer '15**

- Programmed using Relux software (designed lighting layout for different types of rooms)
- Overview of the overall manufacturing process (assembly line) for lighting fixtures

**SAM BUILDING CONTRACTING, DUBAI | TECHNICAL INTERN** **December '14**

- MEP overview (heating and cooling systems)
- Electrical outlet design for projects including malls and private residences

## Activities and Skills

**PULSE 2017 | CORPORATE DIRECTOR** **Spring '16 – Present**

- Designed corporate package for sponsors
- Coordinating with other teams to plan & execute the conference
- Maintaining consistent communication with Corporate Sponsors to ensure smooth execution of their benefits at the event.

**I-CONNECT FACILITATOR (ON-CAMPUS JOB)** **Fall '15 – Present**

- Conducting workshops for incoming students on diversity and inclusion on campus

**LEADERSHIP ROLES**

- Honors Student Council member, Campus Honors Program **Fall '15 – Present**
- Innovation LLC Peer Leader **Fall '15 – Spring '16**

**COMPUTER LANGUAGES AND TOOLS**

C, C++, MATLAB, Python, HTML & CSS, Assembly Language (LC3), MS Office

## Awards and Projects

**FOUNDATIONS OF INNOVATION AND ENTREPRENEURSHIP CERTIFICATE** **March '16**

- Attained certification by Technology and Entrepreneurship Centre at UIUC

**TALE ME A STORY | 1ST PRIZE** **November '15**

- Formed nonprofit organization that connects senior citizens and middle schoolers through journalism
- Developed web-based platform and formulated business model canvas
- Competition: Extreme Entrepreneurial Lock-in, Innovation LLC

**BRACELERT (WIRELESS ALERT SYSTEM) | BEST OVERALL PROJECT** **March '15**

- Designed and prototyped an **IoT** bracelet with Bluetooth controlled alert system for senior citizens
- LEDs and a heart rate monitor were wired to Arduino that alerted nearby contacts of any emergencies
- Competition: CU Makethon (Hardware Hackathon)

**PLUGIT (HOME AUTOMATION SYSTEM) | 3RD PRIZE** **January '15**

- Designed and formed a start-up based on sustainability in the household.
- Competition: Extreme Entrepreneurial Lock-In, Innovation LLC

# Naphat (Quinn) Lertratanakul

**U.S. Citizen**

lertrat2@illinois.edu ● (224) 326-6039 ● *LinkedIn:* naphatlert ● *Github:* kawaiirice

## EDUCATION

**UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN** December 2016
*Bachelor of Science in Computer Engineering* *GPA:* 3.82/4.00

**UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN** December 2017
*Master of Engineering in Computer Engineering*

## WORK EXPERIENCE

**YAHOO! INC** May 2016-Present
*Software Engineering Intern*

- Developing Python 2 and 3 compatible test tools for the Yahoo internal and open source versions of the Apache Traffic Server (ATS)
- Created software to parse data that is replayed through traffic server and generate a checksum to reduce storing duplicate requests and responses
- Extended the functionality for configuration files responsible for IP address filtering

**QUALCOMM TECHNOLOGIES INC** May 2015-Aug 2015
*Software Engineering Intern*

- Contributed to the Factory Test Mode features of the Software Automation Tools for the RF Software team
- Optimized memory allocation and usage by utilizing an existing buffer defined by the firmware and assigning unused portions for each memory allocation request
- Performed measurements and calculations (TX Power, ACLR, EVM, VSWR) for the various technologies supported by the modem (CDMA, WCDMA, TD-SCDMA, GSM, LTE)

## PROGRAMMING LANGUAGES

**Comfortable with** C/C++, Java, Python, HTML & CSS, JavaScript
**Familiar with** PHP & MySQL, Bash, x86, System Verilog

## PROJECTS

**NUSAnswers** Mar 2016-Apr 2016

- Developed a Q&A website for current/incoming students and faculty at the National University of Singapore (NUS) to ask and answer questions related to classes and college life using Javascript, PHP and MySQL
- Worked on the frontend and backend of the question submission feature, which includes image upload, text and tags, and user verification with Google's Recaptcha

**deLIGHTful** June 2015
*Qualcomm HackMobile Project*

- Created an android application which displays the traffic flow of specified roads and/or freeways with AllJoyn's Wi-Fi controlled light bulbs
- Integrated the MapQuest Traffic API and the Google Maps API to give the application user flexibility in choosing traffic information on a specific road or freeway
- Modified the AllJoyn SDK to change color, hue, saturation and brightness depending on the traffic flow data updated through the server from MapQuest

## CAMPUS INVOLVEMENT

**ECE STUDENT ADVANCEMENT COMMITTEE** Aug 2014-Present
*Public Image Committee and Senior Representative*

## AWARDS and HONORS

Mary E. Mohler International Study Grant (2016), GE's Women's Network Scholarship (2015-2016), Oakley Scholarship (2014-2015), Rockwell Automation Scholarship (2014-2015), Alwan Engineering Scholarship (2013-2014), Dean's List, James Scholar

U.S. Citizen

# NISA J. CHUCHAWAT

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60 Copperwood Drive, Buffalo Grove, IL 60089

## EDUCATION

**University of Illinois at Urbana-Champaign** GPA: 3.67/4.00
*Bachelors of Science, Electrical Engineering* *August 2014-December 2017*

- Analog and Digital Signal Processing, Semiconductor Electronics, Data Structures, Wireless Communication Systems, Electronic Circuits, Control Systems

## SKILLS

**Computer:** Linux OS, C, C++, Arduino, Raspberry Pi, Python, MATLAB, Simulink, Cyclone IV FPGA, SystemVerilog, CAD (Quartus II, Autodesk Inventor), svn, git, Microsoft Office
**Language:** Intermediate Spanish (speak, read, write), basic Thai (speak)

## WORK EXPERIENCE

**Bose Corporation** Framingham, MA
*Embedded Software Engineering Intern* *June 2016-August 2016*

- Designed and implemented a Smart Battery Emulator to replace the real battery pack on a development board and allow for more efficient and flexible testing
- Developed UART and PyRO (Python Remote Objects) communication protocols using an Arduino and a Raspberry Pi to allow the emulator to communicate with existing product and test code
- Designed and implemented an I2C slave device using an Arduino

**Kumon Math and Reading** Lincolnshire, IL

- Mentored children (3-15 years old) in math and reading *August 2011-August 2014*
- Provided customer service and data entry for records and planning

## RELEVANT EXPERIENCE

**IEEE Eta Kappu Nu Alpha Chapter** Champaign, IL
*Electrical and Computer Engineering Honor Society* *September 2015-Present*

- Tutor students in ECE-related material with office hours and review sessions
- Organize corporate and social events (tech talks, info sessions, power lunches) within the ECE Department

**HackIllinois Staff** Champaign, IL

- Organize 36 hour hackathon for over 800 participants *August 2014-Present*
- Lead/facilitate throughout the event

**My Youth Leadership Experience – OMNI Youth Services** Buffalo Grove, IL
*President* *August 2010-June 2014*

- Organized annual leadership conference for 40+ eighth-grade students
- Planned fundraisers, led team meetings, contacted speakers, donors, and 10+ schools

## ENGINEERING PROJECTS

**Self-Balancing Inverted Pendulum** Champaign, IL

- Used MATLAB and Simulink for mathematical modeling, friction analysis, and controller design of a Reaction Wheel Pendulum *April, 2016*

**Nibbler Arcade Game** Champaign, IL

- Combination of Snake and Pac-Man *November 2015*
- Written in SystemVerilog and C to create a System on Chip with a USB and VGA interface

**AM Radio Receiver** Champaign, IL

- Built from several subsystems: RC circuit, op-amps, and an intermediate frequency filter *April 2015*

**Self-Navigating Car** Champaign, IL

- Built an autonomous self-navigating car that used photoresistors to follow a light source *November 2014*

## ACTIVITIES

Institute of Electrical and Electronics Engineers, Asian American Association, Women in Electrical and Computer Engineering, UIUC Recreational Volleyball, Illini Billiards Club *August 2014-Present*

## HONORS

University of Illinois James Scholar *August 2014-Present*

**Permanent Address:**
RMMG, Manikarn,
Kolkata 700010,
India
'

# POOJA KANKANI

EMAIL ID: kankani2@illinois.edu
PHONE NO.: (305)9988680

**Current Address:**
918 W Illinois
Street, Townsend,
Urbana, IL 61801

## EDUCATION:

**University of Illinois at Urbana Champaign** Expected Graduation: May 2020
Bachelor of Science, Engineering Undeclared GPA: 4.0/4.0
HIGH SCHOOL: **The Heritage School** Graduated: March 2016
Kolkata, India

## EXTRACURRICULAR ACTIVITIES AND LEADERSHIP ROLES:

**Captain Grievance Cell, High School** **2015**

- Handled and solved cases of ragging and severe indiscipline
- Addressed grievances of students

**Vice Chair, THSMUN, High School Model United Nation** **2015**

- Headed the committee of Association of South-East Asian Nations (ASEAN) as the Vice Chair
- Regulated debate and judged the honorable mentions and best speaker

**Director of Hospitality, Youthopia, High School Fest** **2015**

- Made arrangements for all the guests for the school fest with over 20 participating schools of Kolkata
- Guided all the participating schools to the venue on time by heading a team of volunteers

**Research and Development Head, Entrebiz, High School Business Fest** **2015**

- Helped in planning the entire fest and coming up with various possible events and competitions

**Prefect, High School** **2013**

- Maintained discipline in the school
- Headed the Assistant Prefects and guided them

**Assistant Prefect, High School** **2012**

- Maintained discipline in and outside classroom

## WORK EXPERIENCE:

**Volunteer, Max Foundation** **2005-2015**

- Helped in spreading cancer awareness by participating in a cancer awareness play
- Volunteered in meetings and events in which doctors from across the country answered the questions of various cancer patients
- Participated in story sessions and helped the families of young cancer patients both morally and financially
- Helped in organizing the event “Chai for Cancer” in my city and raised funds through it

## SKILLS AND AWARDS:

- James Scholar **2016**
- Ranked in the Top 10 in high school ISC (Council for the Indian School Certificate) exam (96.25%)**2015**
- Received 50% scholarship on the tuition fee of a year of high school for excellent performance in ICSE
- Programming Language: Java

# Samira Tungare

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## Objective

Seeking a summer internship related to Electrical Engineering.

## Education:

The University of Illinois – Urbana/Champaign
*Bachelor of Science in **Electrical Engineering*** *Graduating May 2020*

Wheaton North High School Class of 2016
*GPA: 3.8*

## Work Experience:

Central DuPage Hospital - Winfield, IL August 2014 - April 2016
Volunteer

- Worked the cash register for the multiple gift shops.
- Set displays with new merchandise in the shops.
- Led family members to conference rooms, hospital rooms, and surgery wards

Pathways Taekwondo

- Black Belt in Taekwondo 2004-2016
- Teach white belt classes and assist in teaching color belt classes to people of all ages

## Engineering Projects:

**Arduino LED Project**

Programmed a musical "light show" using an Arduino board and LED lights

**K'nex Roller Coaster Project**

Designed a roller coaster using K'nex toys in which points were awarded based on the success and complexity of the design.

**Robot Challenge**

Built and programmed a robot to walk from one end of a room to the other while racing other robots.

## Honors & Awards:

University of Illinois James Scholar Honors Program 2016
Top 5% of High School Class 2016
AP Scholar with Distinction 2016
All Conference Athlete for Golf 2014/2015
AP Scholar with Honors 2015

## Activities:

IEEE 2016

Golf 2012-2015

- Member of the Varsity Golf Team during High School
- Team Captain
- Two-time Sectional Qualifier

Varsity Speech Team 2012-2016

- First place at Geneseo in Impromptu Speaking

# sara ezgi akgul

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801 S. State St. Champaign, IL, 61820

Computer Engineering Major
University of Illinois at Urbana-Champaign
Graduating May 2017, 3.31/4.00 GPA

## Interests & Exposure

Operating Systems ♦ Embedded/Real-time Systems ♦ Distributed Systems ♦ Networking ♦ Robotics ♦ Bio-sensing ♦ Sensors ♦ Analog/Digital Circuits ♦ Mobile Sensing ♦ Cloud Computing ♦ Internet of Things ♦ Signal Processing ♦ Deep Learning ♦ Computer Architecture ♦ Virtual/Augmented Reality ♦ Localization

## Relevant Experience

### Linux OS Developer @ CoreOS
May '15 - Oct '15

Developed heavily Kernel interfacing, linux utilities, provided community support, and wrote custom mount and losetup for CoreOS builds, rkt, and Docker

### BIOS, Analog Validation @ Intel
Jun '12 - Jun '14

Owned BIOS automation efforts for Intel/Dell production servers, fixing numerous bugs, and implementing several new BIOS features. Created USB tool with 100x speed increase for memory CPU data eye validation.

### Product Validation Intern @ AMD
May '11 - Aug '11

Wrote thermal verification libraries and firmware for initial APU line of products, and refactored existing code.

### Web Dev Intern @ Wolfram|Alpha
Nov '10 – May '11

Worked on scripts for search engine results pages, created and populated new pages, and lots of bug fixes.

### Experimental Physics @ Fermilab
Sep '08 - May '10

Mass data processing on CDF detector muon-muon collisions for hardware sensor (gap trigger) validation, and reviewed accuracy of bottom quark "tagging" tools.

## Academic Work

### Networking Research @ UIUC/Korea
Jan '16 - Now

Investigating container security, SDN, and various tools for cloud/network virtualization research.

### ECE 385/391 TA @ UIUC
Aug '14 - Now

Helping hold office hours, debugging breadboard, FPGA code, x86, and more. Beginning TAing for 391 soon.

### ECE 110 Lab TA @ UIUC
Aug '11 - Jan '12

Taught lab sections of course twice a week, grading labs, assisting students, revising lab manual, and contributing new content ideas for course improvement.

### Real Time Embedded Lab @ UIUC
Nov '11 - Mar '12

Assisted in building custom OS image for iRobot classroom Beagleboard programming, created website for research group, selected & researched sensors for CS 424 Cyber Physical Systems course.

### Math&Physics Tutor @ UIUC & HS
Nov '11 - Mar '12

Over 200 hours of community service in high school tutoring Chicago-land area students in various levels of mathematics (pre-algebra to BC Calculus), and physics.

## Projects + Involvement

### Woman in ECE (WECE)
Technical Director, 2016-2017, Member Since 2010

### Woman in CS (WCS)
Technical Director, 2015-2016, Member Since 2014

### ACM at UIUC, SigEmbedded, SigArch
Chair 2011-2012, 2014-2016, Member Since 2010

### IEEE at UIUC
Member Since 2010

### Illinois Robotics Organization CARD robotics
Competed in Spring 2011

## Coursework

Digital Circuit Design (ECE 385)
Comp Org. & Design (ECE 411)
Computer Sys Eng. (ECE 391)
Distributed Systems (ECE 428)
Embedded Systems (CS 431)
Mobile Sensing/Comp (ECE 498)
Senior Design (ECE 445)
Virtual Reality (CS 498 SL)
Electromagnetism (ECE 329)

## Proficiencies

Java ♦ C ♦ C++ ♦ C# ♦ Python ♦ Windows shell ♦ Bash ♦ LC3 ♦ VHDL ♦ x86 Assembly ♦ PHP ♦ JavaScript ♦ HTML ♦ CSS ♦ Visual Basic ♦ root ♦ SystemsVerilog

**Sarah Yoonji Shim**
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E-mail: syshim2@illinois.edu

## Education

*University of Illinois at Urbana Champaign*
Master of Science (MS.) — May 2018
Bachelor of Science (BS.) — May 2016
Electrical Engineering

## Job Experience

*Office of Technology Management of University of Illinois*, Urbana, IL — present
Title: Technical Commercial Analyst
*Responsible for accessing patentability and researching marketability of newly disclosed faculty inventions. The job involves meeting and working with variety of professionals (i.e. lawyers, engineers, corporate representatives, doctors, etc.)*

*Johns Hopkins Applied Physics Laboratory*, Baltimore, MD — June 2013
Title: Space Department Research Intern
*Work with engineers and scientists to quantitatively research the effects of solar flare on the Ionosphere. The job mainly involved performing data analysis and writing programs via Matlab. Gave final presentation of results and findings at the departmental staff and researcher meeting.*

## Research Experience

*Micro Nano Technology Laboratory*, Urbana, IL — present
PI: Professor Songbin Gong (UIUC) & Professor Mark Rosenblatt (UIC)
*Master's thesis research in collaboration with the UIC School of Ophthalmology. The research looks to develop a wireless intraocular device that will potentially replace human lens and restore working vision to patients with endstage cornea.*

*Micro Nano Technology Laboratory*, Urbana, IL — June 2014
PI: Professor Logan Liu
*Undergraduate research in the Department of Energy's in-situ solar powered nano-porous desalination research. First part of the research involved working with a PhD advisor in designing the desalination device. Second part of the research involved working in the biolab, conducting experiments on filtering salt water through the designed nanoporous thin-film device prototype.*

## Relevant Skills & Knowledge

Language: **English** (Native) | **Korean** (Native)
Programming: **C++** (Advanced) | **Matlab** (Advanced) | **Python** (Intermediate)
Software: **Sketchup** (Advanced) | **Auto-CAD** (Proficient) | **Excel** (Advanced) | **Visio** (Advanced) | **ADS** (Experienced) | **Simulink** (Proficient) | **HFSS** (Basic)
Technical: **Supply Chain Management** | **Project Management** | **Patent/IP Law**

## Accomplishments

*IEEE USA Region 4 student representative* — April 2016
*Kirkwood Scholarship – 4-year recipient* — 2012-2016
*British Petroleum Professional Strategy Case Competition – Best speaker award* — Feb 2015

## Reference

Available upon request

# SIMRAN PRAMOD PATIL

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## EDUCATION

**University of Illinois at Urbana-Champaign** May 2018
B.S. Computer Engineer | TEC's Innovation Certificate Program | James Scholar, Dean's List GPA: 3.76/4.0
**Coursework:**
Data Structures, Analog Signal Processing, Probability, Discrete Mathematics, User Oriented Collaborative Design
In-progress: Computer Systems Engineering, Interactive Computer Graphics, Virtual Reality, High Tech Venture Marketing
Spring 2017: Digital Systems Laboratory, Machine Learning, Algorithms
**Technical Skills:**
Proficient with: C, C++, Arduino IDE, HTML, CSS, JavaScript
Familiar with: Python, MATLAB, Octave, Eagle Software, Mentor Graphics
On-going learning: x86 Assembly, Unity 3D, C#, WebGL

## EXPERIENCE

**University of Pennsylvania - WeissLabs** Summer 2016
*Engineering Intern, Root Technologies LLC (Internet of Things and Green Tech Industry)*
- Programmed ESP8266 Microcontroller to have LED Feedback and Hardware reset for easier user functionality
- Automated process of WiFi connectivity on firmware end contributing to server-microcontroller communication setup
- Researched circuit implementation, smaller components and SMDs enabling scalability and efficiency of product
- Designed PCB Schematics using Eagle Software for an optimized energy and space efficient design

**University of Illinois at Urbana-Champaign** Spring 2015 - Present
*Visio Schematics Designer, Flashcard Developer and Teaching Assistant for ECE 110*
- Designed circuit schematics using Microsoft Visio in collaboration with Study Blue software to formulate questions
- Held Office hours and tutoring sessions to elaborate on fundamental concepts of Electronics and Electrical Engineering

**Web Dakaar Digital Consultancy LLP, Mumbai** Summer 2015
*Infographics Developer & Social Media Marketing Intern*
- Marketed financial planning firm by synthesizing animated advertisements and visualizing creative content in animation software
- Presented work at BNI Enrich conference for startups and local businesses in India

**University of Illinois at Urbana-Champaign | NAE's Grand Challenge: Enhancing Virtual Reality** Spring 2015
*Undergraduate Researcher under Prof. Mani Golparvar-Fard*
- Researched Virtual Reality in Education; Designed virtual construction site in Unity 3D with assets and modified characters
- Self-learned the technology to use in application for construction worker safety and training purposes

## RELEVANT PROJECTS

**Analog Signal Processing Honors** Spring 2016
- Programmed in MATLAB and Python to develop skills for performing scientific computation
- Final project included computational analysis of signals and use signal processing methods using Python

**User Oriented Collaborative Design** Spring 2015
- Engineered walkers and innovated design for skilled care and assisted living units at Clark Lindsey Village
- Incorporated remote control options and additional organizational features in compact, collapsible unit

**Autonomous Wall-Avoiding Robot Vehicle** Fall 2014
- Programmed Arduino Uno in collaboration with Ultrasonic sensors for proximity detection
- Improvised accuracy with temperature sensor to calculate instantaneous speed of sound
- Added additional control functionality by integrating it with Myo Gesture Control Armband

## ACTIVITIES, HONORS AND LEADERSHIP

- Illinois Engineering Achievement Scholarship Spring 2016
- Technology and Entrepreneurship Center's Silicon Valley Workshop 2016 Winter 2016
- Founders – Illinois Entrepreneurs | *Startup Career Fair Co-Director, 54.io Co-Director* Fall 2016
- Engineering Ambassador at University of Illinois at Urbana-Champaign Spring 2016 - Present
- IEFX Expo Best Poster Award (Topic: Applications of Virtual Reality in Education) Fall 2014
- Innovation LLC Entrepreneurial Lock-in 2015- 3rd Prize Spring 2015

# Penny Xu

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**OBJECTIVE**

To obtain an internship that applies my engineering, leadership and interpersonal skills

**EDUCATION**

**University of Illinois at Urbana Champaign** — Champaign, IL
Bachelor of Science in Computer Engineering, GPA: 3.7 — May 2019

**EXPERIENCE**

**Power Optimization of Electro-Thermal Systems Center** — Fayetteville, AR
Electrical Engineering Intern — Summer 2016

- Prototyped Synchronous Buck Converter by designing and simulating schematic, footprints, and PCB using OrCAD, PSpice, and milling machine
- Modeled and 3D printed buck converter with buck inductor and its winding, heat sink, and circuit board with same traces using SolidWorks

**Wolfram Research** — Champaign, IL
Research and Development Intern — Summer 2015

- Converted 3D Graphics demonstrations to printable format, tested printing parameters, assembled 3D Printing Event Kit for SIGGRAPH 2015
- Developed chess games and exercises using Unity and Mathematica
- Wrote, tested, and documented functions for Mathematica

**ECE Department** — Champaign, IL
Undergraduate Researcher — 2015 – 2016

- Solved formation control problems by designing distributed methods for nodes to cooperatively create a desired formation, simplify problem through using convex optimization algorithms, and simulated algorithms on Matlab
- 2015 Promoting Undergraduate Research Symposium Best Poster award

**Urbana Free Library** — Urbana, IL
Chess Club Instructor (Volunteer, 120+ hrs) — 2010 – present

- Taught chess by playing, lecturing, giving puzzles, and providing private lessons

**PROJECTS**

**IFEX Engineering Course: Arduino Cats** — Fall 2015

- Developed device that transmits data from Arduino to smartphone using audio signals
- Assembled Arduino compatible board that transmit serial port data via 3.5mm sound jack and developed iOS app that displays signals from sensors

**ECE Honors Project: Smart Chess Clock** — Fall 2015

- Designed, developed, and programmed a smart chess clock operated by touch sensors
- Worked on hardware circuit with capacitive touch sensors and Arduino code

**SKILLS**

**Computer**: C/C++, Wolfram Language, Arduino
**Software**: Mathematica, SolidWorks, OrCAD, Altium, Unity, MakerBot
**Languages**: English (Native), Chinese (Native), Spanish (Intermediate)

**LEADERSHIP**

Team Tech Chair, Society of Women Engineers (SWE) — 2015 – present
Pan American Intercollegiate qualifier, University of Illinois Chess Team — 2015 – present
Senior Class President: Lead class events and worked with administration — 2015
National Honors Society President: Funded 2,000+ $ for homeless organizations — 2015

**HONORS/ AWARDS**

James Scholar, University of Illinois — 2016
ECE Department Scholarship Award, University of Illinois — 2015
Good Citizen Award, Daughters of the American Revolution — 2015
Illinois High School Association Board 1 State Champion — 2014
United States Chess Federation $9^{th}$ – $12^{th}$ grade State Champion — 2014