

Contact

www.linkedin.com/in/hanman
(LinkedIn)
medium.com (Blog)

Top Skills

Data Analysis
Machine Learning
Management Consulting

Languages

English
Chinese (Cantonese)
Spanish

Certifications

Ethereum- ConsenSys Academy
Developer Program
AWS Certified Solutions Architect -
Associate

Publications

Synthesis of nanodiamond–
daunorubicin conjugates
to overcome multidrug
chemoresistance in leukemia
Multiscale Simulation as a
Framework for the Enhanced Design
of Nanodiamond-Polyethylenimine-
based Gene Delivery
Nanodiamond Vectors
Functionalized with Polyethylenimine
for siRNA Delivery
Understanding the Surfaces of
Nanodiamonds

Han B. Man

Data Scientist - Machine Learning @ Amazon Web Services
Dabbling in Ethereum Blockchain DApp Development
Orange County, California Area

Summary

I thrive at the intersection between data-driven analysis and thoughtful communication of executable and relatable strategies. I am currently interested in using the latest machine learning and AI technologies to create impactful solutions for businesses. I have gained a technical foundation from a PhD in engineering / nanotechnology, and I am experienced with utilizing machine learning techniques to understand data. I have deep experience diagnosing and solving tough strategic problems--whether it is applied towards management consulting for fortune 100 companies across a variety of industries, or breakthrough cancer therapies in the laboratory. I am also comfortable with both client-facing presentations as well as complex data analysis. I have had success with managing and motivating diverse teams.

Experience

Amazon Web Services

Data Scientist - Machine Learning Engineer
October 2017 - Present (2 years 6 months)
Greater Los Angeles Area

Public articles on some of my work:

<https://www.wired.com/wiredinsider/2019/10/betting-on-the-weather-predicting-tomorrows-energy-prices-using-machine-learning/>

<https://aws.amazon.com/blogs/machine-learning/kinect-energy-uses-amazon-sagemaker-to-forecast-energy-prices-with-machine-learning/>

<https://aws.amazon.com/blogs/machine-learning/analyze-us-census-data-for-population-segmentation-using-amazon-sagemaker/>

AWS Certified Solutions Architect - Associate

- Client-facing data scientist within Amazon Web Services.

- A part of the Professional Services group with a focus on guiding / enabling clients to build machine learning, artificial intelligence, and IoT solutions on the AWS platform.
- We use a wide range of machine learning / data science tools including Python, pandas / sklearn, Apache Hadoop HDFS, Spark, Deep Learning / Neural Networks in Keras, MxNet, Tensorflow, Pytorch, fast.AI and other frameworks, and the many AI APIs available on the AWS cloud.
- We use a wide range of AWS cloud services including SageMaker, Docker, EC2, S3, ECS, Redshift, Lambda, StepFunctions, etc.

ConsenSys Academy

Ethereum Developer

October 2018 - January 2019 (4 months)

Completed the Ethereum Developer Program at ConsenSys Academy

https://github.com/hanbman/eth_decentralized_resume

Created a DApp and smart contract for implementing a decentralized resume platform on the Ethereum blockchain.

Developed in Solidity using Truffle and Remix. Tested using Ganache and MetaMask, deployed to the Rinkeby testnet.

MeterGenius

Data Scientist

January 2017 - September 2017 (9 months)

Clean energy startup focused on improving customer retention for utilities companies by transforming their digital engagement with users and promoting energy savings and efficient energy usage.

Deloitte

Senior Management Consultant

November 2015 - January 2017 (1 year 3 months)

New York, NY

Management Consulting / Strategy-

- Led projects advising top asset management firms in growth, new market expansion, distribution, and M&A integration strategy. Experience with financial forecasting and P&L modeling.
- Advised firms in compensation/organizational structure as well as distribution strategy and hiring timelines.

- Managed groups of analysts, synthesized data and actionable recommendations into client-ready presentations, and communicated key findings to stakeholders.
- Previously part of Casey Quirk and Associates, a boutique management consulting firm focusing on the asset management industry, which was acquired by Deloitte in 2016

Mars & Co.

2 years 3 months

Consultant

May 2015 - November 2015 (7 months)

Greenwich, CT

Management Consulting- strategy generalist working with Fortune 500 companies across a variety of sectors/industries:

- Transformational enterprise strategy for large foodservice client- Mapped core capabilities/competencies to success factors contributing to the recent wins of key accounts and provided suggestions for transformational M&A, margin accretive opportunities.

Senior Associate Consultant

September 2013 - May 2015 (1 year 9 months)

Greenwich, CT

Management Consulting- strategy generalist working with Fortune 500 companies across a variety of sectors/industries:

- Optimized manufacturing footprint (7 plants across NA and LAT) and formulated 5 year Capex investment plan (~\$1.2B) for fortune 500 automotive parts manufacturer.
- Conducted “war games” exercise for top 3 soft drink/snacks company to dissect their relationship with a major independent, private-equity-owned co-packer. Hypothesized likely next moves for expansion by taking the perspective of the private equity firm and communicated strategic implications to our client.
- Managed a team of analysts to evaluate the pricing contract between a top bottler and a soft drinks/snacks client (top 3 in industry). Gained valuable insight on directing areas of analysis and managing multiple workstreams towards final output. In charge of systematic client interface, communicating

new findings and tracking down data needs. Presented insights on pricing competitiveness to the client.

- Built analytical tool to help a fortune 500 automotive parts manufacturer predict impact of cycling faster on manufacturing operations. Performed regression analysis to model the impact on operating efficiency (OEE) caused by part complexity. International project experience interviewing key contacts in manufacturing plants in Germany.

Other industries: consumer packaged goods, consumer retail, credit cards, retail banking

Other functional experience: market sizing and segmentation, go to market strategy, supply chain/sourcing, new market entry, new product strategy

Northwestern University

PhD Researcher

September 2009 - June 2013 (3 years 10 months)

Evanston, IL

I worked in Professor Dean Ho's lab at the Northwestern University engineering department. My research involved the discovery of breakthrough cancer therapies based on using nanoparticles. Specifically, I investigated the use of a carbon-based nanoparticle called nanodiamonds to effectively treat drug-resistant leukemia.

Tutorspree

Private Tutor

September 2010 - September 2012 (2 years 1 month)

Tutored high school students in advanced placement math, science, humanities, and standardized testing.

Caladrius Inc.

Founder, CTO, Engineering Team Lead

December 2009 - March 2011 (1 year 4 months)

Chicago, IL

- Founded Caladrius Inc. to develop antibody-based electrochemical detection technique to accelerate infection detection. Filed a provisional patent ("Method and Apparatus for Detecting Infection in a Patient", 02/2011) and conceived and prototyped blood-sensing device (\$10k budget).

- Uncovered need for improving efficiency of blood-pathogen detection.

Collaborated with Northwestern University medical, business, and law students in a yearlong entrepreneurship project (Medical Device Innovations) to create a business plan for the medical sensing device. Oversaw engineering, explained findings, scientific concepts, and presented business plan to healthcare industry leaders and other key constituents for business plan competitions and funding pitches.

California Institute of Technology
Felberg Memorial Research Fellow
June 2008 - September 2008 (4 months)

Simulated wind flow patterns for Saturn's moon, Titan, to determine a feasible trajectory for balloon exploration of its prominent surface features.

California Institute of Technology
Adelman Memorial Research Fellow
June 2007 - September 2007 (4 months)

Designed and conducted experiments testing properties of carbon nanotubes as nanoscale field-emitters under the effect of an electric field.

Education

Northwestern University
Doctor of Philosophy (Ph.D.), Mechanical Engineering · (2009 - 2013)

ConsenSys
ConsenSys Academy Developer Program, Ethereum
Blockchain · (2018 - 2019)

General Assembly
Data Science Immersive, Data Science / Machine Learning · (2017 - 2017)

California Institute of Technology
Bachelor of Science, Mechanical Engineering · (2005 - 2009)

Arcadia High School
High School Diploma · (2001 - 2005)