

Stephanie Moyerman

DATA SCIENTIST · PHYSICIST · TEAM LEADER · PROBLEM SOLVER

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Education

UCSD (University of California, San Diego)

La Jolla, Ca

M.S. & PH.D. IN PHYSICS - EXPERIMENTAL COSMOLOGY

Sept. 2007 - June 2013

- Supplemental M.S. Degree for Program in Computational Science, Math, and Engineering

Harvey Mudd College

Claremont, California

DUAL B.S. - MATHEMATICS AND PHYSICS

Sept. 2002 - May 2006

- Distinction, Departmental Honors, and 3 Academic Prizes in Physics and the Sciences

Experience

Senior Machine Learning Science Manager, Amazon.com Inc.

Tempe, Az

REGISTRATION, COMPLIANCE, AND CORE SERVICE SCIENCE - CUSTOMER TRUST AND PARTNER SUPPORT

October 2017 - Present

- Develop solutions that protect Amazon and its customers from fraud and abuse, resulting in over \$5B in fraudulent transactions, 1.2M abusive seller account closures, and 2M buyer account closures since 2019.
- Manage a team of 32 contributors (28 ICs and 3 managers), achieving top 4% in manager satisfaction within Amazon.
- Deliver machine learning solutions (clustering algorithms, probabilistic models, embeddings, deep learning, etc.) to over 80 internal to Amazon programs including seller registration, legal compliance, anti-money laundering, reviews, etc.
- Lead organizational vision across 4 organizations, including 3 year planning, YoY operational priorities, and monthly/quarterly business reviews.

Instructor and Curriculum Developer, ManhattanPrep

Southern California and Phoenix, Az

GMAT, GRE, LSAT, AND SAT

Feb. 2010 - Present

- Industry leading instructor (score 4.8/5.0) for a company that hires less than 1% of applicants with 99th percentile scores.
- Curriculum developer and editor for textbooks, study guides, web-based materials, and overall course design across all company offerings.
- Designer and programmer of the ManhattanPrep SAT web application, delivering real time polling, timing, and scoring in the classroom.

Principal Engineer and Director, Intel Corp.

Chandler, Az

PATHFINDING AND INNOVATION - INTEL SPORTS

June 2014 - October 2017

- Drive internal strategy and external partnerships and collaboration, managing a \$4.4M technology portfolio with 16 reports and 8 directs.
- Develop hardware and software solutions for next generation virtual reality and volumetric video: deep learning, image processing, calibration techniques, new camera hardware and sensors, etc.
- Managed big data analytics, cloud infrastructure, device processing, and algorithm development (signal processing, filtering, event detection, pattern recognition, classification, etc.) for Intel's Action, Team Sports, and wearables divisions.

Research Scientist, Intel Corp.

Chandler, Az

DECISION ENGINEERING AND YIELD ANALYSIS

June 2013 - June 2014

- Designed and programmed a C++/python application optimizing Intel's server design portfolio based on clustering and forecasting of workload characteristics, market models, and server chip attributes. Optimization projections result in the billions of dollars in savings.
- Led a team of 8 developers in China and 1 in the US for full-scale application deployment on Intel's cloud.
- Implemented and automated machine learning, simulation, and computer vision algorithms to identify and root cause yield trends.

Publications and Patents

Patents and Invention Disclosures

US Patents

LEAD AND CONTRIBUTING AUTHOR

Jun. 2012 - Present

- 10 granted and 10 pending patents since 2013 spanning topics of ML algorithms, hardware, software, and device architecture.
- For complete listing, see [Google Scholar](#)

Getting Started with Intel Edison

O'Reilly and Maker Media

AUTHOR

Oct. 2015

- Authored Maker Media's introduction to Intel Edison book

Peer Reviewed Publications

Ap.J., PRL, etc.

LEAD AND CONTRIBUTING AUTHOR

Oct. 2005 - Present

- Authored over 31 peer-reviewed publications with over 1300 citations and an h-index of 15
- For complete listing, see [Google Scholar](#)

Skills

MANAGEMENT

Agile development, RAPID, Decision Quality, Portfolio Management, Budget Planning, Innovation, Team Building

DATA ANALYTICS AND MACHINE LEARNING

Neural Networks and Deep Learning, Supervised and Unsupervised Learning, Graph Analytics, Recommender Systems, Statistical Analysis, Image Processing, Mathematical Modeling, Root Finding Algorithms, Partial and Ordinary Differential Equations

PROGRAMMING

Python, R, Java, Matlab, Octave, C, C#, C++, SQL, NoSQL, BASH, HTML, CSS

Awards & Honors

2017	Clio Award , Innovation in media for live statistics integration into the Winter X-Games	<i>Prometheus Global</i>
2016	New Technology Group Award , For the development of bio-sensing algorithms for head worn devices	<i>Intel</i>
2016	New Technology Group Award , For leading Intel's Summer X-Games Technical Exhibition	<i>Intel</i>
2016	New Technology Group Award , For leading Intel's Winter X-Games Technical Exhibition	<i>Intel</i>
2016	New Technology Group Award , Leading demos for Intel's CEO in the Consumer Electronics Show Keynote	<i>Intel</i>
2015	Departmental Recognition Award , Design and demonstration of learning algorithms in action sports	<i>Intel</i>
2014	Departmental Recognition Award , Pioneering the Intel Innovation Symposium	<i>Intel</i>
2013	Departmental Recognition Award , Developing large scale machine learning algorithms for yield analysis	<i>Intel</i>
2013	Einstein Postdoctoral Fellowship , Awarded annually to 12 Ph.D.s in Astrophysics (Declined)	<i>Worldwide</i>
2012	AAUW Dissertation Fellowship , Awarded annually to 50 female doctoral candidates in all fields	<i>Nationwide</i>
2008	NSF Graduate Fellowship , Awarded annually to outstanding graduate students in the sciences	<i>Nationwide</i>
2007	UCSD First Year Graduate Fellowship , Awarded to students showing exceptional promise in Physics	<i>Nationwide</i>
2007	Bell Labs Graduate Fellowship , Awarded annually to 12 women and minorities in the sciences	<i>Nationwide</i>
2006	American Physical Society Apker Award , Best Undergraduate Research in Physics	<i>Nationwide</i>
2006	Vanderbilt Prize Runner Up , Best Undergraduate Research in Physics and Astronomy	<i>Nationwide</i>
2006	Thomas J. Watson Fellowship , Awarded to 25 students annually for independent study and research	<i>Nationwide</i>

Interests

SPORTS

Judo (former nationally ranked competitor), rugby, wakeboarding, surfing, snowboarding, motorcycling, running, lifting, swimming

ART AND MAKING

Amateur glassblowing, glass fusing, woodworking, metal sculpting, furniture design and creation, electronics design and creation

START UPS

Rapid Rehydration (President and Lead Programmer), boardformula.com (First Hired Programmer)