Cody Austun Coleman

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Education

Stanford University — **Stanford, CA**
Doctor of Philosophy in Computer Science — *Present*

Massachusetts Institute of Technology (MIT) — **Cambridge, MA**
Master of Engineering in Electrical Engineering and Computer Science, 5.0/5.0 — *Feburary 2015*
Supervisor: Isaac Chuang

Massachusetts Institute of Technology (MIT) — **Cambridge, MA**
Bachelor of Science in Electrical Engineering and Computer Science, 4.9/5.0 — *June 2013*
One Year Bernard M. Gordon MIT Engineering Leadership Program

University of Cambridge — **Cambridge, UK**
Cambridge-MIT Exchange (CME) in Electrical Engineering — *June 2012*

Experience

Professional & Research

Jump Trading, Vendor Data Group — **Chicago, IL**
Junior Data Scientist — *June 2015–August 2016*
- Engineered systems to curate a centralized source of research and reference data for the firm, including Trading, Research, and Technology to Risk, Middle Office and Accounting teams
- Constructed frameworks and pipelines to analyze data from a variety of vendors to automatically create and update security master, corporate actions, pricing and entity master data
- Communicated internally and externally to understand needs, identify opportunities, diagnose problems, and maintain reliability

Davidson College, DavidsonX and DavidsonNext — **Remote**
Educational Technology Consultant — *March 2015–June 2015*
- Automated data processing for 5 DavidsonX Massive Open Online Courses (MOOCs) and 64 DavidsonNext blended AP instruction courses

MIT, Office of Digital Learning and MITx — **Cambridge, MA**
Research Assistant — *Feburary 2013–Feburary 2015*
- Adapted Latent Dirichlet Allocation (LDA) from natural language processing to uncover behavioral patterns in Massive Open Online Courses (MOOCs) and accurately predict student drop out
- Investigated teacher enrollment in HarvardX and MITx courses in order to redefine the target audience of MOOCs
- Distilled tracking log information from the edX platform into informative features about student behavior and performance

Harvard University, HarvardX — **Cambridge, MA**
Research Assistant — *November 2013–May 2014*
- Explored the impact of spaced study session (inspired by spaced practice phenomenon) in HarvardX courses

Google, Associate Product Manager (APM) Internship — **Zurich, Switzerland**
YouTube Analytics Intern — *June 2012–August 2012*
- Redesigned existing features and developed new features for YouTube Analytics
- Managed a team of 12 to launch estimated time watched and metric comparisons across the world
- Collaborated with numerous teams in YouTube to deal with issues concerning publicity, privacy, accessibility and discovery

Google, Building Opportunity in Leader Development (BOLD) Internship — **Mountain View, CA**
Local Search Quality Intern — *June 2011–August 2011*
- Programmed tools for large-scale data manipulation and analysis to expedite and improve spam detection in Google Places
- Created and administered training documents, videos, exercises, and workshops globally for both R and Google BigQuery

MISTI Mexico, Iniciativa OCW — **Mexico City, Mexico**
Web Developer & Team Representative at el TecnolÒĄgico de Monterrey — *June 2010–August 2010*
- Engineered a website that mapped MIT online course material to three Mexican universities in order to improve accessibility for students and staff

Teaching

MIT, EECS Department — **Cambridge, MA**
Founder's Journey (6.933) Teaching Assistant — *January 2013–May 2014*
- Founded and directed an initiative to help students offset early expenses in evaluating their ideas by awarding monetary grants
- Mentored students and provided feedback on their ideas in order to hone their entrepreneurial skills

MIT, Global Startup Labs formerly known as AITI — **Bangalore, India**
Technical Assistant — *June 2013–August 2013*
- Taught 32 India university students Ruby on Rails and the fundamentals of web development
- Guided 10 teams as they developed prototypes and pitched to local venture capitalists and accelerators

MIT, Physics Department & Experimental Study Group (ESG) — **Cambridge, MA**
Teaching Assistant — *September 2010–December 2010*
- Assisted students during class and office hours by working through problems and answering questions, so students could have a better understanding of the material
- Taught math review sessions, which went over many difficult math concepts in physics, in order to help students who were struggling, so they could still succeed in their coursework

Skills

Programming Languages: Python, C, C++, SQL, LaTeX
Applications: Vi/Vim, Git, tmux, MySQL
Web: HTML, CSS, JavaScript, SCSS, CoffeeScript
Operating Systems: Linux, Redhat, macOS, Windows

Leadership

MIT, Eta Kapp Nu (HKN) Honor Society for EECS — **Cambridge, MA**
President — *May 2012–May 2014*
- Managed MIT's top academic EECS students to host several large events and services including tutoring and course reviews

MIT, Member of Undergraduate Student Advisory Group in EECS (USAGE) — **Cambridge, MA**
Member — *August 2011–May 2014*
- Led efforts to design and build a new student lounge for EECS undergraduate and masters students
- Worked with EECS students to represent student interests on issues including new degree requirements and research programs

Ameson Chinese Elite Program — **Beijing, China**
MIT Student Ambassador — *July 2011*
- Represented MIT in panel discussions about peacekeeping, terrorism, and new energy

MIT, 6.470 Web Programming Competition — **Cambridge, MA**
Team Leader — *January 2011*
- Built a resume editor and management system that won Utility, HTML5, and audience choice awards, totaling $2000 in prizes

Honors

Fellowships & Scholarships

- NSF Graduate Research Fellow
- Google BOLD Immersion Scholar
- MIT Club of Northern New Jersey Scholar
- Stanford EDGE Doctoral Fellow
- Quest Scholar

Awards

- MIT EECS Paul Penfield Student Service Award
- MIT Industrial Advisory Council for the Office of Minority Education (IACME) Student Prize
- Google Patent Award

Professional Memberships

- Tau Beta Pi (TBP) National Engineering Honor Society
- National Society Collegiate Scholars (NSCS)
- IEEE Eta Kappa Nu (HKN) Honor Society

References

Academia

- Isaac Chuang - ichuang@mit.edu
- Anantha Chandrakasan - anantha@mtl.mit.edu
- Angela Duckworth - aduckworth@characterlab.org

Industry

- Lindsay Tobolik - ltobolik@jumptrading.com
- James Buckney - jbuckney@jumptrading
- Vandana Bharvani - vandanab@google.com

Publications

[1] **Cody A. Coleman**. Identifying and characterizing subpopulations in massive open online courses. Master's thesis, 77 Massachusetts Ave, Cambridge, MA 02139, 2015.

[2] **Cody A. Coleman**, Daniel T. Seaton, and Isaac Chuang. Probabilistic use cases: Discovering behavioral patterns for predicting certification. In *Proceedings of the Second ACM conference on Learning@Scale conference*. ACM, 4 2015.

[3] Andrew D. Ho, Isaac Chuang, Justin Reich, **Cody A. Coleman**, Jacob Whitehill, Curtis G. Northcutt, Joseph J. Williams, John D. Hansen, Glenn Lopez, and Rebecca Petersen. Harvardx and mitx: Two years of open online courses fall 2012-summer 2014. *Available at SSRN 2586847*, 2015.

[4] Yohsuke R. Miyamoto, **Cody A. Coleman**, Joseph J. Williams, Jacob Whitehill, Sergiy O. Nesterko, and Justin Reich. Beyond time-on-task: The relationship between spaced study and certification in MOOCs. *Social Science Research Network*, 1 2015. `http://ssrn.com/abstract=2547799`.

[5] Daniel T Seaton, **Cody A. Coleman**, and Jon P. Daries. MIT institutional research report: Teacher enrollment in MITx open online courses, 1 2015. `http://web.mit.edu/ir/mitx/MOOC_teachers_supp_material.pdf`.

[6] Daniel T. Seaton, **Cody A. Coleman**, Jon P. Daries, and Isaac Chuang. Enrollment in mitx moocs: Are we educating educators. *Educause Review (February 2015)*, 2015.

[7] Jacob Whitehill, Joseph J. Williams, Glenn Lopez, **Cody A. Coleman**, and Justin Reich. Beyond prediction: First steps toward automatic intervention in mooc student stopout. *Available at SSRN 2611750*, 2015.