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*

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*
- Communicated internally and externally to understand needs, identify opportunities, diagnose problems, and maintain reliability
- 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

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

MIT, Office of Digital Learning and MITx — **Cambridge, MA**
Research Assistant — *Feburary 2013–Feburary 2015*
- 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
- 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

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

Google, Associate Product Manager (APM) Internship — **Zurich, Switzerland**
YouTube Analytics Intern — *June 2012–August 2012*
- Managed a team of 12 to launch estimated time watched and metric comparisons across the world
- Designed initial draft of playlist analytics for YouTube's curators
- 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 Tecnológico de Monterrey — *June 2010–August 2010*
- Provided extra resourses for students at Mexican universities by building a website to map MIT's online material to their courses

Teaching

MIT, EECS Department — **Cambridge, MA**
6.933 Founder's Journey 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**
8.01 Classical Mechanics Teaching Assistant *September 2010–December 2010*
- Assisted students during class and office hours by working through problems and answering questions
- Taught math review sessions that went over many difficult math concepts in physics to help students who were struggling

Skills

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

Leadership

MIT, Bernard M. Gordon MIT Engineering Leadership Program (GELP) **Cambridge, MA**
GEL Year One (GEL1) *September 2012–June 2013*
- Completed the GELP year one curriculum and group activities on the fundamentals of engineering leadership theory

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, 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 2015
- Stanford EDGE Doctoral Fellow 2015
- ACM Richard Tapia Scholarship 2015
- Google BOLD Immersion Scholar 2011
- Quest Scholar 2010
- MIT Club of Northern New Jersey Scholar 2010

Awards

- MIT Industrial Advisory Council for the Office of Minority Education (IACME) Student Prize 2015
- MIT EECS Paul Penfield Student Service Award 2014
- Google Patent Award 2012

Professional Memberships

- Tau Beta Pi (TBP) National Engineering Honor Society 2013
- IEEE Eta Kappa Nu (HKN) Honor Society 2012

References

Isaac Chuang
Professor of Electrical Engineering and Computer Science
Professor of Physics
Senior Associate Dean of Digital Learning
Massachusetts Institute of Technology
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Angela Duckworth
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Founder and Scientific Director of the Character Lab
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Sanjay Sarma
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Anantha Chandrakasan
Professor of Electrical Engineering and Computer Science
Department Head
Massachusetts Institute of Technology
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Conference Activity/Participation

- MIT Learning International Networks Consortium (LINC) 2016
- Harvard-MIT Online Learning Summit 2015
- American Educational Research Association (AERA) Annual Meeting 2015
- ACM Conference on Learning at Scale 2015
- ACM Richard Tapia Celebration of Diversity in Computing Conference 2015
- MIT Learning International Networks Consortium (LINC) 2013

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. *Social Science Research Network*, 3 2015. http://ssrn.com/abstract=2586847.

[4] Yohsuke Miyamoto, **Cody A. Coleman**, Joseph Williams, Jacob Whitehill, Sergiy Nesterko, and Justin Reich. Beyond time-on-task: The relationship between spaced study and certification in moocs. *Journal of Learning Analytics*, 2(2):47–69, 2015.

[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)*. http://er.educause.edu/articles/2015/2/enrollment-in-mitx-moocs-are-we-educating-educators.

[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. In *Proceedings of the 8th International Conference on Educational Data Mining*. International Educational Data Mining Society, 2015.