Francis Chen

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Background

Graduate degree: M.Eng. in Computer Science and Engineering (CSE) at MIT, GPA 4.8/5.0   9/2016

Undergraduate degree: S.B. in CSE at MIT, GPA 4.6/5.0   6/2015

Programming languages: Python, Scala, Go, HTML/CSS/JavaScript, Java, C++, C, Bash, MATLAB, Perl

Experience

Master's Student, Poggio Lab, Center for Brains, Minds and Machines (CBMM) at MIT   9/2015 - 8/2016
- Thesis: *Modeling Human Vision Using Feedforward Neural Networks*
- Designed and evaluated convolutional neural networks (CNNs) to understand human perception
- Used Caffe for deep learning, Python for high-throughput automation, and C++ for image processing

Software Engineering Summer Intern in Advertising Technology, A9.com   6/2015 - 8/2015
- Designed and built machine learning pipeline for analyzing revenue prediction algorithms
- Pioneered data-driven methodology in problem area with Scala on Spark, involving TB-sized datasets
- Developed winning project in intern hackathon, creating visual search application with team of four

User Experience (UX) Intern, Outlearn Inc.   1/2015
- Designed mockups for creation, discovery, and management of educational content, using UXPin
- Collaborated with company leadership, fellow designer, and engineers, adopting Agile methodology

Technology Associate Summer Intern, Bridgewater Associates   6/2014 - 8/2014
- Built a strategic data ingestion tool for the company's next-generation research platform
- Assessed relevant business problems, designed solution, and implemented solution in Scala

Platform Infrastructure Engineering Summer Intern, Akamai Technologies   6/2013 - 8/2013
- Built a software tool for hard drive error detection, intended for over 10,000 Windows servers
- Designed, developed, and tested software tool, using both Linux and Windows and coding in Perl

Activities

Teaching Assistant for Oral Communication (6.UAT) at MIT   9/2015 - 5/2016
- Led sections of up to 8 students each, providing public speaking coaching and feedback
- Prepared and delivered class-wide lecture on pitching, designed and ran networking workshops
- Served over 48 students over 2 semesters, received Best TA Award in spring 2016

Gordon Engineering Leader, MIT Gordon Engineering Leadership (GEL) Program   9/2013 - 5/2015
- Completed two-year leadership curriculum, earning Advanced Certificate of Engineering Leadership
- Shaped first year GEL student experience as mentor and Assessment Team member
- Enabled record number of admission applications as Communications and Outreach Director

Teaching Assistant for Engineering, Innovation, and Design (ESD.051) at MIT   9/2014 - 5/2015
- Wrote documentation and delivered lectures to explain technical course content
- Answered student questions in-person and online, serving approximately 60 students over 2 semesters

Undergraduate Researcher, Weiss Lab for Synthetic Biology at MIT   6/2013 - 8/2014
- Designed high-throughput microfluidic DNA assembly system, involving both hardware and software
- Earned Technical Report Award from department's Advanced Undergraduate Research Program