Brandon L. Reiss

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Experience

Co-Founder & Head of Engineering, Frame.ai
New York, NY — January 2016 — Present

- Frame helps companies understand and act on thousands of conversations every day by unifying data across chat, voice, and email channels and identifying important moments using a state-of-the-art NLP data enrichment pipeline fed to a flexible analytics interface

Software Engineering Manager, Knewton
New York, NY — May 2014 — December 2016

- Manager of Core Engineering and Adaptive QA Tools teams responsible for scaling data science models and QA introspection tools to support 10M+ students
- Strong leadership on team values, project purpose, vision, and team accountability
- Mentorship of engineers in critical areas of design, communication, and technical implementation
- Delivered ssh tunnel management code for QA tools decreasing latency for simulations from hours to minutes
- Contributed SQL queries and Looker dashboard UIs to enable monitoring of proficiency model performance

Lead Software Engineer, Knewton
New York, NY — Oct 2013 — May 2014

- Contributed to numerical optimization code selecting optimal paths to target assignments given a deadline
- Lead team responsible for debugging system integration with Houghton Mifflin Harcourt as the first Knewton API product and a major milestone in re-usability of ranker components
- Lead design and implementation for batch processing of proficiency model parameters used to improve student response prediction

Software Engineer, Knewton
New York, NY — Sept 2012 — Oct 2013

- Implemented state-of-the-art recommender for educational content including computational framework and statistical models
- Developed tools and procedures used for recommendation QA

Software Engineer, Organic Motion
New York, NY — Jun 2008 — Sept 2012

- Developed tracking methods including score-based sampling used to select best-fit bone orientations, multi-actor activity detection, and 3d data segmentation
- Debugged and made production-ready statistical mixture model used for background segmentation
- Designed and implemented software licensing mechanism based on public/private keys and block cipher encryption along with tools to fingerprint hardware and maintain license databases
- Designed and implemented internal website for automated testing of CI software builds and comparative analyses of motion tracking results
- Developed multi-process Canon EOS camera controller and UI for a vision-based 3d scanner
- Developed distributed architecture for prototype gait analysis motion capture system having 40 cameras spread across 5 compute nodes
- Designed and constructed modular, backlit panels used for a portable motion capture system featured at SIGGRAPH 2008, Intel Core i7 launch, and Popular Mechanics Breakthrough Awards 2008

Software Engineering Intern, Organic Motion
New York, NY — Jan 2007 — Jun 2008

- Designed LED calibration wand made from a machined aluminum base and off-the-shelf flashlight parts
- Designed custom LED camera control boards for shutter-synchronized illumination and molded aluminum housings for cameras and LED boards

- Developed embedded system OS image and front-panel LCD control software for system maintenance

IT Technician, Zamir Computer Consulting
New York, NY Jan 2006 — Aug 2006

- Delivered on-site service to commercial and residential clients all over New York City
- Installed, configured, and maintained enterprise software systems and network hardware

Undergraduate Research Assistant, Rensselaer Polytechnic Institute
Troy, NY Sept 2004 — May 2005

- Co-author of April 2006 article in Applied and Environmental Microbiology
- Contributed to research in isolating Dehalococcoides microorganisms responsible for the reductive dechlorination of poisonous PCB chemicals
- Used PCR, DNA sequence analysis, and gas chromatography to study and classify organisms in culture

Engineering Intern, BAE Systems
Lansdale, PA Summers of 2002 — 2004

- Designed RF-absorbent antenna test facility built December 2005 with $300,000 budget
- Designed rotating antenna test fixture for phase-clock pairing
- Experimented with classifying radio signal polarization using neural networks

Full Stack Computer Skills

Expert	Bash · Python · Git · AWS · Multithreading
Intermediate	Java · C · C++ · Berkeley Sockets · Numerical Optimization · SQL · JavaScript

Education

M.S. in Computer Science, focus in Machine Learning May 2014
New York University, New York, NY · GPA (Cumulative) 3.951

B.A. in Computer Science and Mathematics, minor in Metropolitan Studies Jan 2009
New York University, New York, NY · GPA (Cumulative) 3.789 (Major) 3.829

Academic Honors

- 2011–2012 NYU Hedwig Kurzbart Masters Fellow ($5000)
- 2009 NYU Founders Day Award
- 2009 Graduation honors, magna cum laude
- National Merit Scholarship commended student

References available upon request.