Rachel Fong (rfong)

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http://rfong.github.io

WORK EXPERIENCE

OpenAI, Software engineer *Oct 2016–May 2017*

- Building infrastructure, MuJoCo simulations, internal tools, procedural data generation, and physical rigs for robotics AI research

Locu/GoDaddy, Senior software engineer *Jan 2016–Apr 2016*
Software engineer *May 2014–Jan 2016*

- Automatic content extraction from raw websites, and products for website autogeneration and templating
- Built internal tools, auto data quality pipeline, and several products to improve listings propagation and site building

Techstars, Hackstar (W14 session) *Jan 2014–Apr 2014*

- Engineering & product consulting for 12 early stage startups
- Assisted in running Techstars accelerator program & Demo Day

Lattis, CTO *Oct 2013–Jan 2014*

- Spreadsheet-like web access to portable RDBMS functionality

Lengio, Software engineer *June 2013–Sept 2013*

- First hire. Developed NLP backend to autogenerate contextual ESL learning curricula from user-uploaded documents.

Bluefin Labs, Software engineer *June 2012–Jan 2013*

- Built same-day analytics for consumer responses to TV ads.

INTERNSHIPS

Facebook (2011) - Facebook Places search engine infrastructure

Monster.com (Winter 2011) - Automated related job suggestions

Endeca (2010) - SQL-like data filters in schemaless data engine

Stanford University (2007) - OpenGL laparoscopic suturing simulator; built knot detection, physics, 3D models, & haptic interface

EDUCATION

Massachusetts Institute of Technology (2008–2012)
B.Sc. in Computer Science

Research – Clinical NLP - topic extraction and sentiment analysis (OMCS group), gradient 3D printers (Mediated Matter group)

Activities – admissions blogger, The Tech, Technique

ERRATA

MIT Admissions, Engineering Advisory Board *2014–present*
Educational Council *2014–present*

Always making. Enthusiastic about reverse engineering things I haven't seen before, solving non-first-world problems, and code maintainability.

SKILLS

Python, full-stack web (Django, Rails, devops/deploy/infra, Angular, React, JS, UI/UX, etc). Rusty: C++/C, Java

Data engineering/munging, fast end-to-end prototyping, product generalist

Photography, basic mechanical design & fabrication, illustration & design, event organization, firespinning

FAVORITE PERSONAL PROJECTS

"Meta Markov Mashup" generator

Daft Punk programmable LED visor

$50 tabletop 3D scanner

American Sign Language crowdsourced reverse dictionary & community site

Lexical classifier for satire recognition

Toolpath visualizer + G-code generator desktop app for CNC 2.5D milling

Mechanical design & full fabrication of a human-rideable mecanum drive

RECOGNITIONS

2012 MIT Web Programming Competition (6.470) - 1st place

2009 MIT Battlecode (6.370) - 6th place

USA Computing Olympiad 2007-08 year - Gold division, top 15 nationally

FIRST Robotics, Davis Regional 2007 - Xerox Creativity Award

Publications

Domain Randomization for Transferring Deep Neural Networks from Simulation to the Real World
J. Tobin, R. Fong, A. Ray, J. Schneider, W. Zaremba, and P. Abbeel.
In *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2017.
arXiv 1703.06907

Hindsight Experience Replay
M. Andrychowicz, F. Wolski, A. Ray, J. Schneider, R. Fong, P. Welinder, B. McGrew, J. Tobin, P. Abbeel, and W. Zaremba.
In *Neural Information Processing Systems (NIPS)*, 2017.
arXiv 1707.01495