Timothy K. Paine

Contact

11 Lincoln Lane, New Providence, NJ 07974
t.paine154@gmail.com
908.721.1185

Education

Columbia University in the City of New York — New York, NY
Fu Foundation School of Engineering and Applied Sciences '15 – M.S. in Computer Engineering
Fu Foundation School of Engineering and Applied Sciences '15 – B.S. in Computer Engineering
  Magna Cum Laude
Columbia College '15 – B.A. in Computer Science/Mathematics

Sophia University — Tokyo, Japan — Summer 2011

Work Experience

JP Morgan — Athena Core Developer – New York, NY — March 2016 - Present
- Develop real time reactive analytics platforms (Python, C++)

MayStreet — Software Engineer – New York, NY — July 2015 - January 2016
- Developed low latency market data and order entry systems (C++, C#, Java)
- Developed market data analytics platforms (Python, C++, and R)

Columbia University — Adjunct Associate Professor — New York, NY — Present
- ENGI1006 Introduction to Computing for Scientists and Engineers (Python) — Summer 2015
- COMS3101 Programming Languages - Python (Python) — Spring 2016

Credit Suisse — Equities/Quantitative Analyst Intern – Tokyo, Japan — Summer 2014
- Built predictive models for company earnings and price movement using data mining, machine learning, and wavelet analysis (R, Python)

IBM — Software Group Intern — Dublin, OH — Summer 2013
- Developed and tested the front end of a B2B application using various webdev frameworks (Python, javascript)
- Gained experience in Agile development methodology working for a large multinational company

Columbia University — Teaching Assistant — New York, NY — Fall 2012 - Spring 2015
- Advanced Programming — Spring 2013, Fall 2013
- Computer Architecture — Spring 2015
- Fundamentals of Computer Systems — Fall 2013
- Introduction to Combinatorics and Graph Theory — Fall 2012
- Introduction to Computing for Scientists and Engineers — Spring 2014, Fall 2014, Spring 2015

Projects

Architecture and Design Lab — Researcher — New York, NY — Summer 2012 - Spring 2015
- Hardware Design/Verification/Synthesis and FPGA prototyping of a database accelerator

Computer Architecture and Security Technology Lab — Researcher — Fall 2014 - Spring 2015
- Built a hybrid HW/SW RSA unit for Freedom.press in SystemVerilog

Embedded Scalable Platforms — Fall 2014 - Spring 2015
- Built a Hardware Accelerator for Latent Dirichlet Allocation in SystemC

Facebook Open Academy — OpenStack Team — Spring 2014
- Built two-factor authentication for OpenStack's Keystone Identity Service
- Integrated two-factor authentication with OpenStack's Horizon UI and dashboard

Current projects can be found at http://tim.paine.nyc

Publications	**Q100: The Architecture and Design of a Database Processing Unit.** L.Wu, A. Lottarini, T. Paine, M. Kim, K.Ross ASPLOS 2014: Nineteenth International Conference on Architecture Support for Programming Languages and Operating Systems. **IEEE Micro Top Pick.**
Awards and Honors	**Theodore R. Bashkow Award** — 2014 — Columbia University Computer Science Department **Margarete E. Kennedy Estate Scholarship** — 2010 — Columbia University **Jerry and Evelyn Bishop Scholarship** — 2015 — Columbia University **MSTA Fellowship** — 2015 — Columbia University — Full Tuition for Master's Degree **Japan Student Services Organization (JASSO)** — 2011 — Sophia University National Merit, Advanced Placement, and other pre-college honors Please see http://tim.paine.nyc
References	Available upon request