

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 <i>Magna Cum Laude</i> Columbia College '15 – B.A. in Computer Science/Mathematics Sophia University — Tokyo, Japan
Work Experience	MayStreet — Software Engineer – New York, NY — Present <ul style="list-style-type: none">• Develop low latency market data and order entry systems in C++, C# Credit Suisse — Equities/Quantitative Analyst Intern – Tokyo, Japan — Summer 2014 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 — Adjunct Professor — New York, NY — Summer 2015 <ul style="list-style-type: none">• ENGI1006 Introduction to Computing for Scientists and Engineers (Python) Columbia University — Teaching Assistant — New York, NY — Fall 2012-Present <ul style="list-style-type: none">• 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 — Research Assistant — New York, NY — Summer 2012-Spring 2015 <ul style="list-style-type: none">• Hardware Design/Verification/Synthesis and FPGA prototyping of a database accelerator Computer Architecture and Security Technology Lab — Researcher — Fall 2014-Spring 2015 <ul style="list-style-type: none">• Built a hybrid HW/SW RSA unit for Freedom.press in SystemVerilog Embedded Scalable Platforms — Fall 2014-Spring 2015 <ul style="list-style-type: none">• Built a Hardware Accelerator for Latent Dirichlet Allocation in SystemC Facebook Open Academy — OpenStack Team — Spring 2014 <ul style="list-style-type: none">• Built two-factor authentication for OpenStack's Keystone Identity Service• Integrated two-factor authentication with OpenStack's Horizon UI and dashboard <p>Current projects can be found at http://www.cs.columbia.edu/~tkp2108/</p>
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 Scholarship — 2015 — Columbia University — Full Tuition for Master’s Degree

National Merit, Advanced Placement, and other pre-college honors
Please see <http://www.cs.columbia.edu/~tkp2108/>

Skills

Languages, Tools,
Platforms, Databases

Current Projects Please see <http://www.cs.columbia.edu/~tkp2108/>

Relevant Coursework

Clubs and Activities

References Available upon request