

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 Columbia College '14 – B.A. in Computer Science/Mathematics Sophia University — Tokyo, Japan
Work Experience	Credit Suisse — Equities/Quantitative Analyst Intern — Tokyo, Japan — Summer 2014 <ul style="list-style-type: none">• Mined Bloomberg earnings data to model company performance• Modeled price movement and built predictions for 1-30 days in the future• Analyzed time series using wavelet analysis IBM — Software Group Intern — Dublin, OH — Summer 2013 <ul style="list-style-type: none">• Worked on IBM's Multi-Enterprise gateway project as part of a suite of B2B business software• Experience included enterprise java programming, as well as python, javascript, and HTML/CSS• 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">• Teaching ENGI1006 Introduction to Programming for Scientists and Engineers 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 Programming for Scientists and Engineers — Spring 2014, Fall 2014, Spring 2015
Projects	Architecture and Design Lab — Research Assistant — New York, NY — Summer 2012-Present <ul style="list-style-type: none">• Model various SQL functions in SystemVerilog• Synthesize the models to produce area, power, and timing numbers• Perform FPGA prototyping Computer Architecture and Security Technology Lab — Student Researcher — Fall 2014-Present <ul style="list-style-type: none">• Building a hybrid HW/SW RSA unit for Freedom.press in SystemVerilog Embedded Scalable Platforms — Fall 2014-Present <ul style="list-style-type: none">• Building 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.

Skills	Programming Languages, Tools, Platforms, Databases, Relevant Courses Please see http://www.cs.columbia.edu/~tkp2108/
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 National Merit Scholarship Winner — 2010 Edward J. Bloustein Distinguished Scholar — 2010 AP Scholar — 2010 Junior Engineering Technical Society (JETS) — Best in State — New Jersey — 2010 Panasonic Creative Design Challenge — Finalist — 2009,2010 All State Jazz Ensembles (Guitar) New Jersey Youth Symphony (Violin) YMCA Model United Nations Secretary General, Vice Chair - European Union, Vice Chair - General Assembly, Conference on National Affairs (CONA) Selectee, Youth Governor's Conference Attendee <ul style="list-style-type: none"> • A weekend long conference held in Hershey Park, PA, and attended by ~1600 HS students • I chaired two committees, and was elected in 2009 to lead the next conference as the Secretary General, where I was in charge of 40 committees and 1600 delegates • I directed the other officers, assisted in the planning of several major programs, including both a weekend-long charity drive and a mock "crisis" scenario. • I not only developed strong public speaking skills (debating in front of 1600 high school students is a daunting experience), but also learned critical leadership skills and gained global perspective • I was chosen to attend a conference in Washington, DC, where I spoke with congresspeople, senators, lobbyists, and other leaders in the capitol. • I attended CONA, a weeklong conference of the premier delegates from the various states
Clubs and Activities	Musical Brazilian Jazz Ensemble (Guitar), Afro-Cuban Jazz Ensemble (Guitar), Afro-Columbia Jazz Ensemble (Guitar), Columbia Ski Team Academic Order of Omega Honor Society, IEEE, Application Development Initiative (ADI), Columbia Undergraduate Math Society, Columbia Japan Society (Webmaster), Knickerbocker Motorsports/ FSAE Athletic Columbia Ski Team, Columbia Judo Club (Vice President) Beta Theta Pi Fraternity Vice President, Treasurer, Recruitment Chair (2 Terms), House Manager, InterFraternity Council Representative, Webmaster
References	Available upon request