Louis Rassaby

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Education

Tufts University – Medford, MA
Bachelor of Science, Computer Science, Minor: Economics – December 2014
G.P.A. 3.93, *summa cum laude*, Dean's List 7/7 semesters, National Merit Scholar

Languages

Primary languages: Scala, C, C++, Python, Java, JavaScript, SQL
Other languages: Rails, Haskell, ML, Scheme, C#, OpenGL, GLSL, Processing, d3, MongoDB, Ext.js, Node.js, LaTeX

Notable Projects

Phantom Echoes: Designed and built music adventure game, using landscapes and obstacles based on sampled melody and tempo from user-selected songs; winner of The Echo Nest's "Prize for Excellence" at Tufts Hack 2013
Image manipulation: Wrote and optimized image manipulation tool in C, including compression, rotation, etc.
OpenGL: Created multithreaded recursive ray tracer supporting a wide range of complex rendering techniques in C++; developed sophisticated animated particle system using GPU shaders
Distributed hash table: Created distributed hash table in C with strong partition tolerance and consistency
Universal machine: Built virtual 13-opcode universal machine in C and wrote RPN calculator in its language

Experience

Recombine – New York, NY – *Software Engineer*   February 2015 – Present
- Leveraged cutting-edge genomics to transform biological data into actionable results in a high-performance Scala API
- Revamped reporting, including complete report internationalization and boosting the speed and accuracy of report generation
- Communicated with stakeholders and team members to ensure that business priorities consistently met by the engineering team

CUAHSI – Medford, MA – *Undergraduate Research Assistant*   September 2014 – December 2014
- Created mapping between two scientific ontologies using graph isomorphism and fuzzy matching

Tufts University EECS Department – Medford, MA – *Teaching Assistant*   September 2013 – December 2014
- Dedicated up to 20 hours weekly to explaining concepts and assignments to students
- Instructed students in groups and one-on-one to debug C, assembly code, C++, Scheme, and ML

GE Intelligent Platforms – Foxboro, MA – *EID Software Engineering Intern*   May – August 2014
- Implemented module for internationalization management and dynamic Pig Latin language pack for unit testing
- Ported Chrome-only web app to IE, solving one of the most significant customer-facing issues
- Isolated and resolved SQL deadlock errors that were causing intermittent errors for the client

avast! Antivirus – Prague, Czech Republic – *Software Engineering Intern*   June – August 2013
- Designed and implemented a suite of intelligent client crash management tools, including a dashboard to display data and analytics to prioritize bug fixes and integration with product management software
- Created secure virtual machine reservation service to reserve and load disk images onto virtual machines

Activities & Interests

Tufts Computer Science Exchange, *Member*   September 2012 – December 2014
Tufts Symphony Orchestra, *Principal Cellist*   September 2011 – May 2012
Somerville and Medford Public Schools, *Volunteer Orchestra Instructor*   September 2011 – May 2012