

# Louis Rassaby

Software Engineer

louis@rassaby.com

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## TECHNOLOGY

**Languages:** Scala, Python, Java, PostgreSQL, Apache Spark, JavaScript, Ruby/Rails, C, C++, HTML, CSS

**Specialties:** Back-end engineering, AWS, JVM, Unix, FP, UX design, product management

## EXPERIENCE

**Weill Cornell Medicine, Cornell University** – New York, NY – *Contract Software Engineer* Apr. 2018 – present

- ♦ Created pipeline for processing and analyzing 3D microscope data on a 300+ node cluster

**Wirefreight** – New York, NY – *Cofounder* Jan. 2018 – present

- ♦ Founded customer service platform for logistics companies with pilot in Danish freight forwarder

**Phosphorus Genomics (formerly Recombine)** – New York, NY – *Lead Software Engineer* May 2016 – Dec. 2017

- ♦ Managed the New Products Engineering team, with three engineering direct reports
- ♦ Oversaw the engineering team's release of cardiology assay, adding biological data, new algorithms, and automated tests
- ♦ Implemented multi-tenancy across 10 Scala and RoR apps using PostgreSQL row level security
- ♦ Functioned as product manager in rebuilding Phosphorus' molecular diagnostics platform and clinic portal
- ♦ Coordinated and implemented integration with Xifin billing software
- ♦ Developed algorithm using Apache Spark for identifying regions of low quality sequencing reads
- ♦ Designed Phosphorus' logo and branding

**Recombine (acquired in May 2016)** – New York, NY – *Software Engineer* Feb. 2015 – May 2016

- ♦ Transformed terabytes of genetic data into actionable results in a high-performance Scala API built on Akka HTTP
- ♦ Built UX to educate over twenty thousand people on their risks of passing on genetic disease
- ♦ Revamped patient reporting, including internationalization, diagnosis pure FSM, 400% performance improvement
- ♦ Collaborated with scientists in FertilityMap study, identifying genetic variants and their links to infertility
- ♦ Developed constrained optimization algorithm to compute optimal schema for demultiplexing sequencing samples

**CUAHSI** – Medford, MA – *Research Assistant* Sept. 2014 – Dec. 2014

- ♦ Established mapping between two large hydrological ontologies using graph isomorphism and fuzzy matching

**Tufts University EECS Department** – Medford, MA – *Teaching Assistant* Sept. 2013 – Dec. 2014

- ♦ Dedicated 20 hours weekly to instructing students in C, assembly code, C++, Scheme, and ML

**GE Intelligent Platforms** – Foxboro, MA – *Edison Software Engineering Intern* May 2014 – Aug. 2014

- ♦ Implemented module for internationalization and created Pig Latin language pack for unit testing
- ♦ Resolved SQL deadlock errors that were causing intermittent errors for the client

**Avast Antivirus** – Prague, Czech Republic – *Software Engineering Intern* June 2013 – Aug. 2013

- ♦ Built suite of client crash management tools with analytics to prioritize bugs based on frequency and severity
- ♦ Implemented virtual machine reservation app for QA team to reserve and load disk images onto virtual machines

## EDUCATION

**Tufts University** – Medford, MA Sept. 2011 — Dec. 2014

B.Sc. Computer Science, Minor: Economics

G.P.A. 3.93, *summa cum laude*, Dean's List all semesters, National Merit Finalist

## ACTIVITIES

**Jazz Cello:** Regular performances around NYC Dec. 2015 – present

**Versace Spring 2017 Campaign:** Composed and performed soundtrack Dec. 2016

Past: Tufts Symphony Orchestra (Principal Cellist), volunteer orchestra instructor, cello teacher