## BENJAMIN LEE GREENMAN

phone: 936.666.1126 email: blg59@cs.cornell.edu

EDUCATION Cornell University 2013 – 2014

Master of Engineering, Computer Science, GPA 3.52

Cornell University 2010 – 2013

Bachelor of Science, GPA 3.47

Hudson Valley Community College 2009 – 2010

GPA 3.78

Phi Theta Kappa National Honor Society

## **EXPERIENCE** Research Assistant, Cornell University

Summer 2013 – Fall 2014

Ithaca, NY

(Summer 2013 – Summer 2014) Worked with Professor Ross Tate to determine the feasibility of a new construct for object-oriented languages. Analyzed the inheritance hierarchy of over 13 million of lines of Java code across 60 open source projects to analyze existing practice and assess the work needed to implement the redesign. Presented findings at PLDI '14.

(*Summer 2014 – Fall 2014*) Building on the previous work, designed a type system for adding conditional inheritance to object-oriented languages with generics. Overcame challenges of decidability and soundness to create a practical, language-independent formalism.

## Software Engineer, Rentenna Inc.

Summer 2012 – Winter 2013

New York, NY

Implemented REST-ful api for growing startup. Wrote an extensive library of HTML and XML crawlers. Designed caching abstraction to enrich local database with dynamic external resources. Published user-facing web page features and modules. Gained experience with unittesting frameworks and a branching Git model.

## **Teaching Assistant, Cornell University**

Spring 2012 – Spring 2014

Ithaca, NY

Introduced undergraduate students to functional programming. Designed assignments and exam questions. Wrote a test harness in the OCaml language to automate grading. Interacted extensively with students in one-on-one and classroom settings. Helped manage a staff of approximately 20 teaching assistants.

COURSEWORK Operating Systems Programming Languages Computer Organization

Algorithm Design Organizational Behavior Abstract Algebra
Information Networks Functional Data Structures Entrepreneurship
Compilers Policy Analysis Object-Oriented Design

**QUALIFICATIONS** Awards: Cornell Teaching Award, 2014 & 2013

Programming Languages: Python, OCaml, SQL, Coffeescript, Sass, Java, Haskell

Libraries and Tools: Emacs, GIMP, Git, LATEX, MongoDB, Scrapy, SQLAlchemy, XPath

Other: 35 video game world records, 3rd place Pennsylvania State Birling championship 2014