Eric Campbell

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EDUCATION

CORNELL UNIVERSITY
PhD in Computer Science
Expected May 2022 | Ithaca, NY
Conc. in Programming Languages
Department of Computer Science

POMONA COLLEGE
BS in Computer Science, BS in Mathematics
Grad. May 2017 | Claremont, CA
Conc. in Programming Languages
Department of Computer Science

INTERNATIONAL SCHOOL OF AMSTERDAM
Grad. May 2013 | Amsterdam, The Netherlands

LINKS

Github:// **ericthewry**
LinkedIn:// **ericcampbell**
StackOverflow:// **ericthewry**

COURSEWORK

UNDERGRADUATE
Software Foundations (Coq)
Programming Languages
Senior Seminar (Security, Programming Languages, & Ethics)
Computability & Logic
Computational Statistics
Number Theory & Cryptography

SKILLS

PROGRAMMING
Over 5000 lines:
Haskell • Coq • Java-/CoffeeScript • Bash
Python • Ruby on Rails • LaTeX
Over 1000 lines:
OCaml • R • MySQL • C++ • Java
Familiar:
Elm • C • HTML/CSS • iOS

INDUSTRY EXPERIENCE

ORIGINATE | Software Engineering Intern
May 2015 – Aug 2015 | San Francisco, CA

- Developed Massive multi-user Ruby on Rails & Coffeescript applications.
- Won Nation-wide intern hackathon.

GLADLY,INC | Software Engineering Intern
May 2014 – Aug 2014 | Palo Alto, CA

- Worked on the Tab for a Cause team in JQuery and Python to redesign the front-end implementation of the website.
- Improved new-user downloads by 30%.
- Developed front-end widgets for the browser extension.

RESEARCH

PROGRAMMING LANGUAGES @ POMONA COLLEGE | Research Assistant
August 2016 – Present | Claremont, CA
Worked with Professor Michael Greenberg to prove Soundness and Completeness for Finite-Trace Linear Temporal Logic (LTL_f). Developed a decision procedure for the logic. Proved the axiomatization equivalent to the temporal axioms in Temporal Netkat (TNK), resulting in a completeness proof for TNK. Resulted in my **thesis** , a submission to POPL 2018, and a submission to FoSSaCS 2018.

DATABASES @ POMONA COLLEGE | Research Assistant
Jan 2016 – Aug 2016| Claremont,CA
Worked with Professor Melanie Wu on the development of QuickTSI, an fast algorithm for finding (partial) subgraph isomorphisms on temporal graphs (graphs with time-varying edges). Built an in-memory database prototype implementing this algorithm.

NUMBER THEORY @ SCRIPPS COLLEGE | Research Assistant
Worked with Professor Christopher Towse to develop a construction algorithm for Integer Matrices with Integer Eigenvalues (IMIEs). Created a web app to create an IMIE from an arbitrary input matrix. Results published in The Mathematical Scientist.

INDEPENDENT PROJECTS

MATHSWIPE | Technical Lead
Manage a distributed team to build CoffeeScript puzzle game. The game randomly generates boards with arithmetic problems to solve by swiping. Developed an algorithm to ensure that every random board has a solution.

ROOMDRAW | Technical Lead
Ruby on Rails & PostgreSQL application to automate the Pomona College room-draw process. Algorithmically assigns rooms based on preferences.

TEACHING

Spring 2017	TA	Database Systems	Pomona College
Fall 2016	TA	Programming Languages	Pomona College
Spring 2016	Head TA	Intro to CS	Pomona College
Fall 2016	Head TA	Intro to CS	Pomona College