

# ErichHayden Campbell

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## EDUCATION

### CORNELL UNIVERSITY

PH.D. IN COMPUTER SCIENCE  
Expected May 2022 | Ithaca, NY  
M.Sc. IN COMPUTER SCIENCE  
Expected May 2019 | Ithaca, NY  
Conc. in Programming Languages

### POMONA COLLEGE

B.A. IN COMPUTER SCIENCE  
B.A. IN MATHEMATICS  
Graduated May 2017 | Claremont, CA  
Conc. in Programming Languages

### INTERNATIONAL SCHOOL OF AMSTERDAM

INTERNATIONAL BACCALAUREATE  
Graduated May 2013 | Amsterdam, The Netherlands  
Conc. in Mathematics

## LINKS

Github:// [erichthewry](#)  
LinkedIn:// [ericcampbell](#)  
StackOverflow:// [erichthewry](#)

## COURSEWORK

### GRADUATE

Network Programming Languages  
Advanced Systems

### UNDERGRADUATE

Software Foundations (Coq)  
Programming Languages  
Senior Seminar (Security, Programming Languages, & Ethics)  
Computability & Logic

## SKILLS

### PROGRAMMING

Over 5000 lines:  
Haskell • Coq • Java • Python • Ruby on Rails •  $\text{\LaTeX}$  • bash  
Over 1000 lines:  
OCaml • R • MySQL • C++ • Java  
Familiar:  
Elm • C • HTML/CSS • iOS

### FOREIGN LANGUAGE

Professional French • Survival Dutch

## 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 user downloads by 40%.
- Developed front-end widgets for the browser extension.

## SELECTED PUBLICATIONS

### COMPLETENESS FOR LOGICS ON FINITE TRACES ERIC CAMPBELL, MICHAEL GREENBERG

FoSSaCS | October 2017

Present Sound and Complete axioms for Finite-Trace Linear Temporal Logic (LTLf) and Linear Dynamic Logic (LDLf)

### KLEENE ALGEBRA MODULO THEORIES RYAN BECKETT, ERIC CAMPBELL, AND MICHAEL GREENBERG

PLDI | November 2017

Generate Soundness proofs, Completeness proofs, and Decision procedures for KAs plus a Sound, Complete and Decidable, client theory.

### INFINITENESS AND LINEAR TEMPORAL LOGIC ERIC CAMPBELL, ADVISED BY MICHAEL GREENBERG

Pomona College | May 2017

Proved Soundness, Completeness and Decidability for Finite-Trace Linear Temporal Logic. Developed a decision procedure for the logic. Proved the axiomatization equivalent to the temporal axioms in Temporal NetKAT, making a completeness proof possible for TNK.

### CONSTRUCTING INTEGER MATRICES WITH INTEGER EIGENVALUES CHRISTOPHER TOWSE AND ERIC CAMPBELL

The Mathematical Scientist, UK | June 2016

Developed a construction algorithm for Integer Matrices with Integer Eigenvalues (IMIEs). Created a web app to create an IMIE from an arbitrary input matrix.

## PROJECTS

### DATABASES @ POMONA COLLEGE | RESEARCH ASSISTANT

Jan 2016 – Aug 2016 | Claremont, CA

Worked with Professor Melanie Wu on the development of QuickTSI, a fast query system for finding (partial) subgraph isomorphisms on temporal graphs.

## TEACHING

Fall 2017	TA	OOP and Data Structures	Cornell University
Spring 2017	TA	Database Systems	Pomona College
Fall 2016	TA	Programming Languages	Pomona College
Spring 2016	Head TA	Intro to CS	Pomona College
Fall 2015	TA	Intro to CS	Pomona College