

OBJECTIVE

Seeking an internship or co-op that will allow me to take full advantage of my passion and experience in Software Engineering.

EDUCATION

- Iowa State University** Ames, IA
Bachelor of Science, Computer Engineering *Expected graduation: May 2018*

HONOR

Iowa State Deans List, Spring 2017.

PROJECTS

- qc-hack-harvard** <https://github.com/vtomole/qc-hack-harvard>
Visualizing quantum computing algorithms in the browser *October 2017 - Present*
 - Virtual machine:** Implemented a virtual machine in Python to execute Quantum Algorithms for the frontend.
 - Hack Harvard:** Won the Hacker Prize (Sharing information openly; doing something for its own sake; finding creative solutions to problems.) at Hack Harvard.
- C48** <https://github.com/vtomole/c48>
A Modern Scalable Programming Language *September 2017 - Present*
 - Parser:** Implemented a parser that can parse arithmetic expressions and build an abstract syntax tree out of these expressions.
 - Interpreter:** Implemented an interpreter that can walk the abstract syntax tree and apply function operators to its arguments.
- Evie** <https://github.com/vtomole/evie>
A Programming Language Playground *September 2016 - Present*
 - Cantor:** Wrote a programming language inspired by Set Theory that won a prize for “Most interesting project” in a Fall 2016 Hackathon.
 - Shell:** Implemented a Shell interpreter that is capable of executing Linux shell commands.
 - Kiana:** Wrote a virtual machine that is capable of interpreting an assembly language.
- Victorys AI Playground** <https://github.com/vtomole/victorysaip playground>
Documenting my education on Machine Learning *May 2016 - August 2016*
 - AIPlayground:** Programmed basic neural networks in Jupyter Notebook, then trained these neural networks on a GPU.
 - Blog:** Implemented in Django and deployed using Heroku: <https://victorysaip playground.herokuapp.com/>

PROGRAMMING SKILLS

Skilled: Java, C, Quantum Computing, Common Lisp, Scheme

Experienced: Python, Linux, Git, BASH, Emacs, HTML

Basic competency: Javascript, PHP, C++, Ruby

EXPERIENCE

- Iowa State Academic Success Center** Ames, IA
Tutor *September 2017 - Present*
 - Tasks:** I help students understand the material that is taught in the “Theoretical Foundations in Computer Engineering” class. I am also tutoring a “MultiVariable Calculus” class.

WRITING

Architecture for a trapped ion quantum computer <https://vtomole.github.io/static/microwave-arch.pdf>