

## OBJECTIVE

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

## EDUCATION

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

## HONOR

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Iowa State Deans List, Spring 2017.

## PROJECTS

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- 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

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

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

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

## EXPERIENCE

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- 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

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