

Nate Young

Contact:

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Education:

Electrical Eng. and Computer Science
UC Berkeley: Current GPA 3.8
Graduation Expected May 2020

Experience, hackathons, awards:

- **CalHacks:** Nov 2016
Created application to write LISP code with voice commands
- **Teaching:** 2012-2016
Taught elementary students basic computer science
- **Zero Robotics Competition:** Jan 2016
As part of high school team, progressed to finals; our code was run on the ISS
- **USA Physics Olympiad:** May 2016
Won title of "Bronze medalist" - national competition

Clubs:

- **Launchpad:**
Contributed to voice recognition & conversational AI system
- **Hackers @ Berkeley:**
Helped organize events, gave talk on how knowing computer science theory can help inform practical considerations
- **Machine Learning @ Berkeley:**
Worked on Investarget project: data science and machine learning for recommending startups to venture capital firm

Selected projects:

- **Plane Cloud Renderer:** Java
Designed novel techniques for computer graphics and implemented them in a raycasting rendering engine
- **Frederic:** Java
Implemented an esoteric command system; uses operant conditioning to change its behavior.
- **STLFiles:** Java
Designed and implemented code for creating 3d models of e.g. the Mandelbrot set and arbitrary heightmaps.
- **NeuralNets:** Java
Implemented simple backpropagation neural networks.
Can train XOR and MNIST.
- **UniversalSearch:** Python
Designed and implemented theoretical machine learning algorithm that searches the space of all inputs to a particular program for one that produces a given output, via tree search.
- **Review:** C++
Designed and implemented incomplete method for parsing user reviews and extracting "typical" phrases and reviews.

Programming languages: Python, Java including Android experience, JavaScript & HTML including some experience in libraries like AngularJS, some lower-level languages like C variants

Main interests in computer science: Machine learning, complexity theory, computability theory, information theory