

# Michael Recachinas

student, software engineer by day, electrical engineer by night, opera singer in the shower

## about

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## programming

Python, C/C++  
JS, OCaml, Rust,  
Java, HTML5, CSS3

## frameworks

Flask, Node.js, iOS  
Android SDK

## interests

PL theory/compilers  
machine learning  
neural networks  
computer graphics  
computer vision  
NLP  
full-stack dev  
quantum computing

## education

- since 2012 **University of Virginia** MS in Electrical Engineering Expected Spring 2015  
Concentration in RF/Microwave Engineering  
Current GPA: 3.8
- 2010-2014 **University of Virginia** BS in Electrical Engineering Graduated May 2014  
Triple Major in Electrical Engineering, Computer Science, and Physics  
Minor in Applied Mathematics  
Overall GPA: 3.2

## experience

- 2014 - now **Axios, Inc.** Software Engineer Dulles, Virginia
- 2013-2014 **WillowTree Apps** Web Developer Intern Charlottesville, Virginia  
Rewrote an open source library for Backbone.js and Marionette.js; Built IRC bots that aided with internal task automation (included sentiment analyzer).
- 05-08/2013 **Scitor Corporation** Program Manager Intern Chantilly, Virginia  
Developed risk reduction package for multi-million dollar next-generation memory unit for National Reconnaissance Office satellite. Built iOS application.
- 2012-2014 **GroundsForArgument.org** Lead Web Developer Charlottesville, Virginia  
Designed and created progress monitoring system for students and teachers.

## activities

- 12-05/2014 **University of Virginia** Teaching Assistant Charlottesville, Virginia  
Instructed labs, graded homework and exams, held recitation and office hours. Courses: Data Structures, Computer Graphics, Graduate Microwave Engineering, and Graduate Microwave Engineering Lab.
- 2013-2014 **IEEE MTT-S** Undergraduate Fellow Charlottesville, Virginia  
Designed and tested a high impedance substrate for an low power antenna.
- 2010-2012 **University of Virginia** Athletic Department Tutor Charlottesville, Virginia  
Tutored Calculus I, II, III, Differential Equations, Statistics, Probability, Intro Programming, Software Development, Discrete Math, Digital Logic Design

## projects

- 2014 **BeerToCats.com** Final Project for Operating Systems  
Implemented histogram of oriented gradient (HOG) feature detection and trained a support vector machine (SVM) classifier in Python to detect solo cups, cans, and bottles, ultimately covering them up with a random image.
- 2014 **COOL Interpreter & Compiler** Programming Languages  
Built the lexer, parser, semantic analyzer, interpreter, x86-64 compiler, and optimizer for an object-oriented pedagogical language using primarily OCaml.
- 2013 **MindFlow** Capstone Project  
Integrated pressure sensor and Bluetooth microprocessor into hydrocephalus shunt; Developed Android application to collect pressure readings and perform predictive modelling of failure rates using neural networks and gradient descent.
- 2012 **Image Processor with Built-in Raytracer** Computer Graphics  
Built a command-line version of "The Gimp" in C++ with Beier-Neely morphing; Added raytracing functionality; Optimized raytracer using bounding volume hierarchies; Added interactivity with OpenGL.