# MichaelRecachinas

#### about

1620 Webster St. NW Washington, DC 20011 202.258.6350

m.recachinas@gmail.com mgr3yp@virginia.edu

### 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

Concentration in RF/Microwave Engineering

Current GPA: 3.8

2010-2014 University of Virginia BS in Electrical Engineering

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

Charlottesville, Virginia

Expected Spring 2015

Graduated May 2014

2013-2014 WillowTree Apps Web Developer Intern

Rewrote an open source library for Backbone.js and Marionette.js; Built IRC

bots that aided with internal dedicated task automation.

**Scitor Corporation** Program Manager Intern 05-08/2013 Chantilly, Virginia

> Developed risk reduction package for multi-million dollar next-generation memory unit for National Reconaissance Office satellite. Built iOS application.

**GroundsForArgument.org** Lead Web Developer 2012-2014

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 Engineer-

ing, and Graduate Microwave Engineering Lab.

**IEEE MTT-S** Undergraduate Fellow 2013-2014 Charlottesville, Virginia

Designed and tested a high impedance substrate for an low power antenna.

University of Virginia Athletic Department Tutor 2010-2012 Charlottesville, Virginia

Tutored Calculus I, II, III, Differential Equations, Statistics, Probability, Intro Pro-

gramming, 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, semantec 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.