

MATTHEW ADAMS

SOFTWARE ENGINEER

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EXPERIENCE

Software Engineer (Core Engine R&D) - Wolfram Research

December 2016 - Present

- Adding features, as well as finding and fixing bugs as a member of the Wolfram Cloud Notebooks team.
- Constantly improving the speed, quality, and test coverage of graphics rendering in the Wolfram cloud.
- Rewrote older 2D graphics rendering system using modern technologies, including React, Flow, and ES6.

Visualization Intern (Core Mathematica) - Wolfram Research

May 2015 - December 2016

- Created a highly-efficient framework for interactive graphics effects, such as plot drop lines and point highlighting.
- Worked on front-end graphics features and bugs across Wolfram's cloud computing platforms.

Software Engineering Intern - MaxPoint Interactive

Summer 2014

- Made a variety of improvements to the service that schedules jobs to run on MaxPoint's clusters.

PyLearn Developer - Carleton College

September 2012 - June 2013

- Took on a leadership role on the six-person team that built PyLearn, an easily-extensible system that improves Python's error messages for beginner programmers.
- Motivated a push to complete PyLearn ahead of schedule- in time to change it from a student project into a real-world system that quickly became popular with students (with over 20,000 errors logged from lab computers).
- Maximized the team's effectiveness and cohesiveness by carefully choosing tasks to delegate based on each person's interests and experience.

Physics/Astronomy Research Programmer - Carleton College

Summer 2011

- Developed software- including numerical integrators, curve fitting tools, and graphing utilities- that helps astronomers better understand the accuracy of orbital motion approximations.

EDUCATION

University of North Carolina: Chapel Hill, NC

2013 - 2016

- MS in Computer Science.
- Gained a diverse skill set, including the ability to draw from a wide variety of computer science subdisciplines, ranging from machine learning to sound simulation to robotics.
- Prepared and gave lectures, graded, and held office hours as a Teaching Assistant for multiple classes.

Carleton College: Northfield, MN

2009 - 2013

- BA in Physics and Computer Science, *magna cum laude*.
- Distinction in Senior Comprehensive Exercise.
- Inducted into Sigma Xi: The Scientific Research Honor Society.
- Dean's List (top 10% of class, one year).
- Math Tutor for the Math Skills Center.

SKILLS

- Extensive experience with JavaScript (plus React and Flow) and Python (plus Matplotlib and NumPy).
- Significant work done using Java, C, C++, Objective-C, CSS/HTML, Wolfram Language (Mathematica), PL/pgSQL (PostgreSQL), and Emacs Lisp.
- Presentation tools: \LaTeX , LightWave3D, Paraview, and Adobe Photoshop, Illustrator, and After Effects.
- Very comfortable with written and oral presentations; have given three well-received speeches to 500+ people.
- Conversational in French.