# **Morgan Thomas**

morgan.a.s.thomas@gmail.com • (734) 355-3870 GitHub: https://github.com/morganthomas

LinkedIn: https://www.linkedin.com/in/morgan-thomas-29a923b7

# Software Engineer with Leading-Edge Applied Math

Versatile problem-solver employing best practices in analysis, engineering, algorithms, and code.

## Core Competencies Delivering correct software based on solid engineering

Clear technical communication tuned to audience and context Sound and innovative mathematical analysis of real-world problems

## Selected Skills Programming languages/paradigms

C# .NET JavaScript C Dart Lisp OO Functional programming Software engineering

Web dev. Agile Linux Windows Git Subversion SW architecture Design patterns Automated testing/TDD

### Computer science

Data structures Complexity analysis (big-O, etc.) Parsing Formal languages **Applied math** 

Statistics and probability Data visualization Combinatorics Graph theory Calculus Linear algebra Numerical optimization Abstract algebra Topology Communication

Documentation/technical writing Teaching Self-teaching Good listener

### **Professional Experience**

## Developer. IHS Markit. Oct. 2015 - present.

Maintain integrity of public financial research tools for one of world's largest investment firms, by managing releases and performing maintenance dev. Independently design and develop in-house Web page performance analysis tool, incl. data collection, storage/retrieval, and analysis.

# JavaScript Instructor. Saisoft, Inc. (contractor for). Nov. 2015 – Dec. 2015.

Trained IT professionals in JavaScript using self-developed courseware.

### Independent R&D

### Yoga. May 2015 - present.

https://github.com/morganthomas/yoga

Developed novel, robust and flexible mathematical algorithm for UI layout which forms basis of UI rendering engine under active development. Aims to be a better, backwards compatible alternative to HTML/CSS for Web dev.

#### Education

Refactor U. Full-stack JS bootcamp graduate. Jun. 2015 - Aug. 2015.

### University of Connecticut. Philosophy, MA. 2013 – 2015.

Math and philosophy research resulted in three publications in top journals. Cumulative GPA 4.1.

### Arizona State University. Psychology, BS. 2009 – 2013.

Minors, Mathematics and Philosophy. Thesis on philosophy of computation. Cumulative GPA 3.83.

### **Academic Honors**

Top scorer, Putnam Mathematical Competition at Arizona State University. 2013. National Merit Scholar. 2009.