# Scott R. Mathews

# Software Engineer

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# **Education**

Indiana University - Bloomington

August 2014 - May 2018

Master of Science in Computer Science (2018), Bachelor of Science in Computer Science (2014 - 2017)

Relevant Coursework: Advanced Functional Programming, Algorithm Design & Analysis, Artificial Intelligence, Compilers, Computer Vision, Computing Theory, Data Mining & Analysis, Data Structures & Algorithms, Machine Learning, Programming Languages, Software Engineering, Statistics

# **Relevant Experience**

Microsoft, Seattle (Bellevue), WA

May 2017 - Current

Software Engineer II, Search & Assistant

- Overhauled search page in Outlook Mobile for Android, replacing frontend architecture with a more modern MVVM stack
- Led Android client implementation of an end-to-end instrumentation contract, to support modern AB testing in search

#### Software Engineer, Cortana Experiences

- Used Bing's frontend monolith to implement web-based settings pages for Cortana experiences
- Maintained and added features to a Cortana voice skill which ran on a microservice

#### Software Engineer Intern, Enterprise Cortana

- Developed Cortana skill for assisting in coordinating meetings within Microsoft through Outlook calendar
- Contributed to development of new Enterprise AI platform on Cortana team

#### Indiana University, Bloomington, IN

August 2015 - May 2018

Assistant Instructor, Introduction to Artificial Intelligence, Games & Puzzles, Mathematical Foundations of Informatics

- Designed, built, administered, and graded homework assignments for Introduction to Artificial Intelligence
- Built a system for machine-reading names and grades on physical papers using computer vision to aid in grading duties

TCS, Cincinnati, OH

June 2016 – August 2016

#### Software Engineer Intern

- Developed concierge web application for the Tata Global Delivery Center front desk
- Employed a stack of React, Redux, MongoDB, and Express

# **Projects**

## Research Assistant, Bioinformatics

- Applied newly developed metrics to various datasets to provide performance data for paper, published at https://doi.org/10.1007/s10618-019-00622-6
- Gathered impact data for bioinformatics journals, published at <a href="https://doi.org/10.1093/bioinformatics/btaa071">https://doi.org/10.1093/bioinformatics/btaa071</a>
- Built system to generate insights in large text datasets by calculating correlation between sets of terms

#### Compiler, Racket

- Built a multi-pass compiler for a subset of the Racket language for graduate compiler course
- Source code available upon request (private to avoid plagiarism)

## Eagle Scout Project, Campsite

 Led recreation improvement project in my hometown from design through approval in local council, to execution as the head of 40 volunteers

#### Miscellaneous

Familiar Languages: Kotlin, Java, C#, Python, JavaScript, Racket

Frameworks: Android, ASP.NET, React

Architectural Experience: MVVM, MVC, Microservices, Monoliths, Spaghetti

Other: Figma, Agile, Scrum, Test Driven Development, Version Control (Git)

Activities & Interests: Sailing, Hiking & Backpacking, Fitness, Skiing, Shooting, Travel, Writing (genre fiction), Reading, AI Progress, Former Cellist, Aspiring Pianist, Experiencing Subject of Life