

ETHAN MCCARTHY

 ethmcc.github.io

 in/ethmcc

 ethmcc

EMPLOYMENT

Lead Product Engineer

 Bill360

 2022 – current


 Tampa, Florida


Leading software development activity at a FinTech startup.

C# .net Vue MongoDB Docker Terraform
AWS Lambda Agile Methods Azure DevOps CI/CD
Unit Testing Acceptance Testing

Senior Software Developer

 Two Fish Creative

 2021 – 2022

 West Palm Beach, Florida


Team lead on full-stack enterprise web platform in the Medical Billing space. Mentored other developers. Collaborated with clients to deliver business value.

Python Flask Vue Redis MySQL Docker Pandas
AWS Elastic Beanstalk ElastiCache RDS Lambda
ECS RESTful API design Pytest Linux Bash
Microsoft SQL Server PowerShell GitHub CI/CD

Software Engineer

 Skillion Inc.

 2020 – 2021


 Bethlehem, Pennsylvania

Developed full-stack Android applications and web apps for an e-bike platform.

Java Android React AWS IoT JUnit OpenCV
C++ Automated Testing Google Cloud Platform
Google Maps Platform Machine Learning

Visiting Assistant Professor

 University of Florida

 2018 – 2020

 Gainesville, Florida

Published original research in computer science and symbolic logic. Led research seminars and conferences. Developed online courses utilizing multimedia lectures, interactive software teaching tools, and digital textbooks.

PERSONAL PROJECTS

I enjoy working on side-projects. You can find write-ups on my programming blog: <https://ethmcc.github.io/projects/>. These include:

- A native Android Application written in Java
- A hardware pomodoro timer built on the Arduino platform with C++
- A progressive web application built with React for math/CS education
- A Python library for efficiently solving combinatorial problems

EDUCATION

Ph.D. Mathematics

UW–Madison

 2018

 Madison, Wisconsin

Computer science, computability and complexity, algorithmic information theory (Ph.D. 2018, M.A. 2014)

TECHNICAL SKILLS

C# Java Python C++ C
Ruby .net Flask Rails
JavaScript Vue React
MATLAB Numpy SQL NoSQL
MongoDB Redis MySQL Pandas
Pytest Linux Bash PowerShell
Jira Azure DevOps CI/CD
Terraform Docker AWS AWS GCP
OOP Automated Testing

OTHER EXPERIENCE

- *Art of Problem Solving*. Teaching coding to talented high school students.
 - *Intro to Programming with Python*
 - *Intermediate Programming with Python*




SELECTED PUBLICATIONS

- *Pointwise complexity of the derivative of a computable function*. Arch. Math. Log. (2021). DOI: f7ms
- *Cototal enumeration degrees and their applications to effective mathematics*. Proc. Am. Math. Soc. 146 (2018). DOI: f7mt

SELECTED AWARDS

- Graduate Research Fellowship, NSF, 2014
- Herbert T. Graham Scholar, 2011 & 2012
- Math in Moscow Scholarship, AMS, 2012
- Herzog Competition, 1st Prize, 2011

OTHER INTERESTS

-  Collegiate **Sailing Instructor**.
-  **Snorkeling** enthusiast.
-  **Pickleball** beginner.