Sisir Potluri

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Education

University of Michigan

Ann Arbor, MI

- B.S. in Computer Science and Business | GPA: 4.0/4.0 | Expected Graduation: May 2023
- Relevant Coursework: Data Structures and Algorithms (A+), Foundations of Computer Science (A+), Web Systems & Intro to Computer Organization (Elected For Fall 2021)

Experience

MathWorks Inc.

Natick, MA

Software Engineering Intern

May 2021 - August 2021

- Engineered tools and verification algorithms in JavaScript using the QUnit and FuncUnit frameworks to simulate user interaction with a JS-based web application product in a Scrum/Agile workflow while actively collaborating with developers on design ideas and software
- Architected a machine learning program to predict code failures for a company-wide build-andqualification platform with the MATLAB classification toolkit, reducing FNR by 71%
- Paricipated in teamwide events to discover and classify software bugs using an internal bug tracker

University of Michigan Future of Programming Lab

Ann Arbor, MI

Academic Researcher

August 2020 - April 2021

- Worked in a team of 3 student researchers in a rotational paired programming setup to write and debug additional features for Hazel, a coding environment that enables hole-driven development
- Originated syntactic rules for conditionals using OCaml and connected with the browser-based UI

Projects

Codobi Website (Prototype: codobi-7eb99.web.app)

June 2021 - Present

- Initiated Codobi, a social networking interface for showcasing coding projects, and leading a team of global developers to construct its full-stack web architecture using JavaScript, React, and Redux
- Crafting a front-end based on strategic UX design principles and connecting it with Google Firebase's database management to produce a swift, thoroughly-tested, and secure platform
- Conducting meetings and "mobs" to blueprint and implement features in an Agile-based workflow

Library Catalog (GitHub: github.com/sisirpotluri/book-catalog)

May 2021

- Integrated abstract data types with optimized algorithms to implement a cross-functional library catalog for the command line in C++ that efficiently sorts and searches over 10,000 books
- Leveraged GoodReads data and machine learning to train a predictor model that synchronizes with user activity in 0.02 seconds and recommends books using hashmaps and priority queues

Mythic Cards Game (GitHub: github.com/sisirpotluri/CardGame)

May 2020

• Assembled and tested a C++ card game that features an automatic polymorphic bot-player class which simulates realistic gameplay and makes artificial decisions in under 0.3 seconds

Skills

Technologies

- Languages: C, C++, Java, Python, JavaScript, Node.js, OCaml, Python, MATLAB, R, HTML
- Tools: React, Firebase, QUnit, FuncUnit, Git, Perforce, Django, Polyspace, ReactNative, Heroku
- Platforms: VSCode, Xcode, Linux, Unix, MacOS, iOS, Windows, Chrome Dev Tools, Webflow

Specializations

Object-Oriented Software Systems, Web Applications, Dynamic Programming and Algorithms