■ sam@macalu.so | 🏫 macalu.so | 🖸 oonis | 🛅 oonis

Work Experience

Amazon Web Services Arlington, VA

SOFTWARE DEVELOPMENT ENGINEER

October 2019 - Present

- Developed scalable cloud-based solutions for enterprise clients using AWS services.
- · Optimized system performance, reducing latency by 15 percent through code refactoring and architectural improvements.
- · Collaborated with cross-functional teams to design and implement new features for AWS products.

Vertafore East Lansing, MI

SOFTWARE ENGINEER April 2019 - October 2019

- Developed and maintained Java web applications for insurance and securities clients.
- Migrated existing architecture and source code to a static Angular codebase.
- Designed and implemented an SQL database for user authentication.
- · Overhauled infrastructure to utilize serverless computational architecture, improving scalability.

Better Games LLC East Lansing, MI

November 2018 - October 2019 FOUNDER

- Designed and implemented the C# backend and netcode for communication with Steam.
- Managed publisher communications and handled legal documentation for company formation.

Michigan State University School of Planning, Design and Construction

East Lansing, MI

DEVELOPER

- Utilized ArcGIS to display vacancy data statistics on a PHP-based website.
- Developed a login plugin with user management for the WordPress CMS.

Michigan State University Institute for Cyber-Enabled Research

East Lansing, MI July 2017 - February 2019

February 2019 - April 2019

TECHNICAL ASSISTANT

• Wrote build scripts and maintained packages for the High-Performance Computing Cluster (HPCC).

• Upgraded systems to a new node cluster, improving computational efficiency.

Michigan State University RS&GIS

East Lansing, MI

WEB DEVELOPER

November 2015 - March 2017

- Developed the admissions portal and course registration system for the MSU College of Social Work.
- Maintained the course registration website for the MSU School of Human Resources and Labor Relations.

Michigan State University Plant Research Laboratory

East Lansing, MI

RESEARCH ASSISTANT

December 2012 - January 2015

- Collaborated on projects involving Visual Phenomics, an image recognition system for analyzing photosynthetic data of plants.
- Developed PhenoMath, a tool for analyzing Visual Phenomics output using pattern recognition and outlier detection algorithms.

Projects

CMS G2

CMS used by insurance and securities companies to maintain appointments and aggregate data.

2019

- Developed in Java with an LDAP user system for authentication.
- · Integrated with AWS for cloud-based data storage and processing.
- Streamlined appointment management and data aggregation for clients.

Puttin' Around

Online multiplayer mini golf game distributed via Steam.

2019

- Developed in C# using the Unity engine.
- Implemented dedicated servers for seamless multiplayer gameplay.
- · Achieved distribution on Steam, reaching a wide audience.

MSU Social Work Undergraduate Application System

APPLICATION SYSTEM FOR MSU STUDENTS TO APPLY TO THE SCHOOL OF SOCIAL WORK.

2017

- Built with PHP and a MySQL database for efficient data management.
- Included an administration portal for managing applications (not publicly available).
- Simplified the application process for students and administrators.

MSU School of Human Resources and Labor Relations Course Registration

Web-based course registration system for MSU's School of HRLR.

- Developed in PHP with a MySQL backend for dynamic data handling.
- Provided an intuitive interface for students to register for courses.
- Improved administrative efficiency by automating registration workflows.

Education

Michigan State UniversityEast Lansing, MICOMPUTER SCIENCE2018

• Placed 4th at the ACM ICPC 2012.

- Placed 3rd at MHacks 1.
- · Relevant coursework: Algorithms, Data Structures, Software Engineering, Machine Learning.

Skills_

Programming Languages C#, Go, Java, JavaScript/TypeScript, PHP, Python, SQL

Frameworks and Libraries Angular, React

Cloud and DevOps AWS, Docker, Kubernetes

Tools and Other Skills Git, CI/CD, REST APIs, Agile Development

2017