# ESHMA RAGHAVAN

reshma.ragh@gmail.com | linkedin.com/in/reshma-raghavan-03038821b/ | github.com/reshmar00/ | reshmar00.github.io/

### **EDUCATION**

**University of Utah** August 2022 - December 2023

Master's, Software Development

September 2013 - April 2015

GPA: 3.9

**Symbiosis International University** MBA, Communication Management

**University of Madras** June 2009 - June 2012

Bachelor's, Visual Communication

### PROFESSIONAL EXPERIENCE

Salt Lake City, UT, USA **University of Utah** 

Research Assistant (Software Developer)

June 2024 - Present Executed a product design-focused full-stack web application development project, enhancing user experience and backend efficiency

- with React.js and Next.js
- Streamlined ML workflows through Docker containerization, driving a digital transformation in a DevOps setting, and enabling cross-platform scripting to enhance efficiency and adaptability in ML operations
- Boosted research project efficiency by implementing Data Version Control (DVC) to automate workflows for research students, encompassing a data pipeline and model registry for MLOps
- Skills: React.js, Docker, RESTful APIs, Next.js, Data Version Control (DVC), Cross-Platform Scripting, DevOps Automation, MLOps

PassiveLogic, Inc. Holladay, UT, USA

Jr. Machine Learning & Object Detection Engineer

February 2024 - June 2024 Trained, tested, and analyzed image classification performance across MacStudio, VertexAI, and PyTorch in service of building out an

- Object Detection pipeline for integration into PassiveLogic's iOS application
- Conducted timed testing and performed data analysis to ensure model accuracy and performance
- Developed and organized a comprehensive database of diverse objects to enhance the model's generalization and robustness
- Collaborated with cross-functional teams, including software developers and data scientists, and ensured continuous integration and deployment through GitLab in an Agile environment
- Skills: CoreML, MLOps, Data Pre-processing, PyTorch, VertexAI, Apple Vision, Google Cloud Platform (GCP), Version Control, GitLab, CI/CD, Technical Architecture, Agile, Sprint Planning

#### TECHNICAL PROJECTS

## **Recipe Sharing Website**

- Full-stack web application that allows users to share and discover recipes
- Hosted React frontend on AWS S3 and Django backend on AWS EC2, leveraging cloud infrastructure for browsing and adding recipes
- Recipes stored in an SQLite database within the Django backend
- Skills: React.js, Django, SQLite, Python, JavaScript, SQL, AWS (Amazon Web Services), AWS S3, AWS EC2
- Link to project

## FRAMEWORKS AND LIBRARIES

Front-End: React.js, Angular, Next.js, jQuery, D3.js, Chart.js

**Back-End:** Node.js, Express.js, Flask, Django, .NET, LINQ (Language-Integrated Query)

Machine Learning: PyTorch, TensorFlow, NumPy, Pandas, CUDA, cuDNN

Data and Analysis: MySQL, PostgreSQL, MongoDB, Jupyter (Notebook), Matplotlib, scikit-learn, JSON (Data format)

Networking and Infrastructure: Docker, Google Cloud Platform (GCP), AWS EC2, AWS S3, TCP/IP, DNS, TLS, Linux/Unix, Bash, Zsh

Version Control and CI/CD: Git, GitLab, Github, REST APIs, DVC (Data Version Control)

**Testing:** JUnit (Unit testing framework), XCTest (Swift), Mocha, Jest, pytest

#### **CORE COMPETENCIES**

Full Stack Development, DevOps, Containerization, Automation, Test-Driven Development (TDD), Frontend Development, MVC (Model-View-Controller) Architecture, Backend Development, Web Development, Mobile Development, Software Development Lifecycle (SDLC), Cross-Platform Software Integration, Data Structures & Algorithms, Object-Oriented Programming (OOP), Continuous Integration/Continuous Deployment (CI/CD), Robust Software Engineering