# SHOPHINE SIVARAJA

Atlanta, GA • +1(706)202-8305 • shophine@gmail.com • shophine.dev • linkedin.com/in/shophine • github.com/shophine

# **EDUCATION**

UNIVERSITY OF GEORGIA, Master of Science in Computer Science

August 2019 – May 2021

Coursework: Data Science Practicum, Algorithms, Computer Networks, Software Security Cyber Forensics, Cloud Computing

GPA: 3.94 / 4.0

ANNA UNIVERSITY, COLLEGE OF ENGINEERING GUINDY, Bachelor of Engineering in Computer Science

August 2015 - April 2019

Coursework: Data Structures, Algorithms, Machine Learning, Security, Networks, Operating System, Software Engineering

GPA: 3.74 / 4.0

# **TECHNICAL SKILLS**

Programming Languages: JAVA, C, C++, SQL, NodeJS, PHP, Python, JavaScript, Ruby

Databases: MySQL, MongoDB, Postgres SQL, SQLite

Frameworks: Express, Spring Boot, MVC, React, Jekyll, .NET, GIS

Mobile Development: Android, Flutter, Firebase, Ionic

## PROFESSIONAL EXPERIENCE

UNIVERSITY OF GEORGIA

Athens, GA

# **Software Developer (Research Assistant)**

February 2020 – Present

- Developed and designed a user-friendly website in Jekyll by creating layouts, writing methods in Ruby to generate contents from data files and automating CI/CD pipelines for deployment.
- Working with a team of three, writing controllers in ASP.NET MVC framework and performing LINQ queries in C# for SQL Server database.
- Designed an enhanced dashboard and reduced the researcher's workload by 40% by improving the process of generating reports with a statistical data model

Technologies Used: Node.js | MVC | AWS | Jekyll | Python | C# | MySQL | Git

# SOFTLOGIC INFOSYSTEMS PRIVATE LIMITED

Chennai, India

Java Developer Intern
 April 2017 – May 2017
 Developed an android application in JAVA for the elearning system and integrated it with backend services by REST API.

- Implemented the UI design for the coursework module for premium users in an eLearning system.
- Worked on the payment module and authenticated the user endpoints in Node.js for an eLearning system.

Technologies Used: JAVA | Android | MySQL | NodeJS | REST | Git

### PROJECT EXPERIENCE

# Microsoft Malware Classification Challenge

January 2020 – Present

 Developed a classifier with 94% accuracy for large set of documents in a distributed fashion with Google Dataproc and tested our model with Scikit-learn libraries.

Technologies Used: Python | Dask | Google Cloud | Distributed Systems | Git

#### **Online Movie Booking Application**

October 2020 – December 2020

Designed a website for movie booking application and built the backend system for it in Spring Boot MVC pattern.

Technologies Used: Spring Boot | JAVA | MVC | AJAX | JavaScript | Git

# Estimating end-end performance of Google Cloud Serverless Function

September 2020 – November 2020

Worked on performance analysis of APIs in Google Serverless Function to provide performance factors in Service Level Agreements.
 Technologies Used: Google Cloud | NodeJS | API | REST | Git

# **Dynamic Memory Overflow Detection using Taint Analysis**

January 2020 – March 2020

Detected the memory overflow attacks with 90% accuracy and tracked the program instruction and data propagation via library calls in PIN.
 Technologies Used: C++ | PIN | LINUX | Git

# HTTP Downloading with Range Requests

August 2019 – September 2019

 Implemented a JAVA Multithreaded application that requests an object in various range via HTTP calls, reconstructed it back to the original object, and verified the correctness using SHA256 checksum.

Technologies Used: JAVA | API | Git

# Unobtrusive Authentication of smartphone users by context-aware behavioral biometrics

January 2019 – April 2019

 Created an android application to build a multi-modal (Gait, Geospatial) behavioral biometrics and used location-based data modeling using Geofence to improve the accuracy of the system to 95%. Implemented Access Level Service Provider based on the outcome of the model. Technologies Used: JAVA | Android | NodeJS | R | Git

#### **Harvest Crop Price Prediction System for Farmers**

January 2018 - March 2018

Built an android application in JAVA and integrated a sowing date prediction model by Linear Regression approach in Microsoft Azure.
 Technologies Used: JAVA | Android | Microsoft Azure | REST | Git

# **CERTIFICATION**

- AWS Fundamentals: Going Cloud-Native, Coursera
- Learning Spring with Spring Boot, LinkedIn

# **LEADERSHIP**