

SHOPHINE SIVARAJA

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EDUCATION

University of Georgia, Franklin College of Arts & Sciences

Athens, GA

Master of Science in Computer Science

August 2019 – May 2021

Coursework: Cyber Security, Computer Networks, Algorithms, Software Security Cyber Forensics

GPA: 3.94 / 4

Anna University, College of Engineering Guindy

Chennai, India

Bachelor of Engineering in Computer Science

August 2015 – April 2019

Coursework: Data Structures, Algorithms, DBMS, Machine Learning, Computer Security, Computer Networks, Operating System, Cloud Computing, Software Engineering

GPA: 8.47 / 10

TECHNICAL SKILLS

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

Frameworks: Express, Ionic, Spring, MVC, Spring Boot

Database: MySQL, Postgres SQL, SQLite, MongoDB

PROFESSIONAL EXPERIENCE

University of Georgia, Warnell School of Forestry and Natural Resources

Athens, GA

Software Developer – Graduate Assistant

February 2020 – Present

- Collaborated with the researchers to develop a statistical data model from various sensor data of rivers across Athens.
- Designed an enhanced dashboard with Google Visualization API and statistical report generation module.
- Reduced the researcher's workload by 35% - 40% by improving the process of generating reports with statistical data model.

Softlogic Infosystems, Pvt Ltd.

Chennai, India

Full Stack Developer Intern

April 2017 – May 2017

- Implemented the coursework module and premium users' interface in Web Application for eLearning system.
- Designed an android application using RESTful API for the eLearning system.
- Developed a Stock Maintenance System for the restaurants in the food court in android using Firebase.

PROJECT EXPERIENCE

Dynamic Memory Overflow Detection using Taint Analysis

January 2020 – Present

- Implemented a taint analysis technique to detect memory overflow attacks.
- Program execution was inspected using PIN tool in dynamic fashion.
- Tracked the program instruction and tainted data propagation via library calls.

Unobtrusive authentication of smartphone users by context-aware behavioral biometrics

January 2019 – April 2019

- Created an android application to build a multi-modal (Gait, Geo-spatial) behavioral biometrics from the data being collected by the mobile sensors.
- Collaborated with a team of 3 members and implemented Location based Data Modelling using Geofence which improved the accuracy of the system.
- Implemented an Access Level Service Provider for the user application based on the score generated by the model.

Community-based Healthcare Provider

January 2018 – February 2018

- Created an android application for the healthcare providers and the patients.
- Designed a priority based serving system using MySQL and RESTful API.
- Implemented live tracking system for Emergency Cases and Urgent Blood Requirement modules.

Harvest Price Prediction System for Farmers

September 2018 – October 2018

- Created a web application that is modelled to project the harvest price for the farmers using NodeJS.
- Implemented sowing date prediction model by Linear Regression approach and computations were on the cloud using Microsoft Azure which maximize the yield and to utilize the monsoon as best as possible.
- Implemented the price prediction interface and notification service provider.

LEADERSHIP AND CAMPUS INVOLVEMENT

Workshop Organizer, CEG Tech Forum, Anna University

September 2017 – February 2018

- An ISO 9001:2015 student-run organization that conducts an international techno-management fest with UNESCO patronage annually by the College of Engineering Guindy (CEG), Anna University.

Technical Co-Ordinator, The Arts Society of CEG, Anna University

October 2016 - February 2017

- An annual intercollegiate cultural festival at College of Engineering Guindy (CEG), Anna University.

Director of Photography, The Guindy Times

September 2016 – April 2017

- The official campus magazine of Anna University.

Captain, Lawn Tennis Team, Anna University

November 2015 – January 2017

- Represented Anna University at state level lawn tennis tournaments.