# **Purandhar Sundaramoorthy**

New York | (607)-235-8260 | pv.vittalan@gmail.com | github | linkedin | Website

#### **EDUCATION**

# Binghamton University, State University of New York

Master's in Computer Science

Aug 2022 - Expected May 2024

Data Structures & Algorithms, Database Systems, Cloud Computing, Web Programming, Design Patterns, Software Project Management

# Anna University, Chennai, India

Bachelor's of Engineering in Electrical and Electronics

Aug 2015-May 2019

#### TECHNICAL SKILLS

Languages: Python, Javascript, TypeScript, Embedded C, SQL

Database: MongoDB, MySQL, PostgresSQL, Oracle

IoT Stack: TASMOTA, Node-Red, Grafana

Web-Development: HTML5, CSS3, React, Node.js

**Data Analytics:** PowerBI, NumPy, Scikit, Pandas, Matplotlib Cloud & Containers: AWS, GCP, Docker, Kubernetes

#### PROFESSIONAL EXPERIENCE

### Entertainment Technologies Inc., Software Development Intern (remote) | California, USA

July 2023 - Present

- Created an agile frontend interface for a media management product, seamlessly integrating REST API with React UI components library to deliver cohesive user interactions and functionalities, supported by Express.js for backend HTTP communication.
- Implemented business rules and validation features by debugging the existing designer and configuration webpages within the application tool, addressing bugs and ensuring version control using github for seamless code managing and updates.
- Designed AWS cloud functionalities, including S3 and AWS Glacier storage mechanisms, implemented an external trigger mechanism for retrieval processes, and enhanced server deployment procedures in EC2 service.

# Systech Solutions, Software Engineer | Chennai, India

Nov 2021 - Mar 2022

- Programmed 'Dopplr,' an innovative ML product for Analytics and Machine Learning experiments for Risk & fraud detection by applying multiple Machine learning algorithms leading to more accurate fraud detection and 15% reduction in processing time.
- Interpreted the crucial task of assisting a Data Scientist to seamlessly transition their model to the production, while collaborating with the server-side team to integrate the analytics layer with the Dopplr seamlessly.
- Coded database migration software, integrating metadata thereby reducing migration time and optimizing operations by 10%

#### Apar Innosys, Associate System Analyst | Chennai, India

Mar 2020 - Oct 2021

- Engineered the Product Life Cycle of an IoT model in Innoculate, a scalable SaaS platform, tailored for bank security and monitoring.

  Programmed the IoT model, incorporating multiple sensor data and camera inputs, enabling real-time data processing, and integrated cloud storage for analyzing information from IoT devices, enhancing overall system functionality
- Automated a software by object-oriented design to increase the IoT model's efficiency by 5%, while managing multiple software services
- Revitalized system stability by 10% through analytical problem-solving, collecting data from MongoDB, while employing Python-based analytical and data visualization tools to analyze 10 million data samples for statistical modeling, gaining insights for decisive actions

# PROJECT EXPERIENCE

#### V'amass (<u>v-amass.herokuapp.com</u>)

May 2022

- Developed a Social Media web application using full Stack (MERN) and facilitated the web application with accounts, authentication, posting images, commenting, and watching timeline events of the connections, similar to instagram
- Spearheaded the software development using various frameworks and libraries of Javascript like React, Redux, and jQuery for DOM manipulation and AJAX calls for the client side of the application, while utilizing Node.js for the backend and databases like mongoDB for structural and GCP for non-structural data storage

# **Data Analysis on Fire Incidents**

Dec 2022

- Analyzed JSON data using a Non-relational database on fire incidents that occurred in Austin between 2018 and 2021. Identified correlations between seasons and incidents, as well as trends across districts, to ensure preparedness and the reliability of resources.
- Evaluated 10 million data samples using Mongo Shell, Pymongo and Visualized data using Power BI for pre-planning and being proactive.

# **Drawbot** (HACKATHON)

Aug 2019

• Crafted a C-based autonomous rover to independently traverse unexplored landscapes, employing wireless sensors to map a 2D path on a screen making a map-making rover. Executed within a 48-hour group project, showcasing collaborative teamwork and determination.

#### Robotic Arm

• Developed an Android Application using MIT App inventor to remotely control a 3D Printed arm using Bluetooth

Oct 2018

• Programmed the arm with a challenging mathematical algorithm in C that works synchronized in 360<sup>^</sup> at maximum accuracy

## **CERTIFICATIONS**

Intellipaat - Full Stack Web Developer - MERN Stack (MongoDB, Express.js, React.js, Node.js) and Microsoft SQL

Apr 2022

Udemy- AWS Cloud integration and communication using AWS IoT Core.

Apr 2020

# **ACHIEVEMENTS**

- Awarded College's top athlete for achieving 25+ podium finishes in Athletics, including a National Gold Medal in Long Jump
- Earned a Leadership Excellence Award for skillfully managing administrations as the President of a LEO club (324-A1)
- Secured 1st position in the Tech Quiz competition at SSN college's Invente 3.0 Techfest, surpassing 50 strong competitors nationwide