

# Purandhar Sundaramoorthy

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## EDUCATION

### Binghamton University, State University of New York

Master's in Computer Science (3.4/4)

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, C, C++, Java, Embedded C, SQL

**Tools:** PowerBI, NumPy, Scikit, Pandas, Matplotlib, Dask, Keras

**IoT Stack:** TASMOTA, Node-Red, Grafana

**Web-Development:** React, NodeJS, HTML,CSS, (MERN Stack)

**Database:** MySQL, Oracle, MongoDB

**Cloud:** AWS, GCP

## PROFESSIONAL EXPERIENCE

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

July 2021 – Present

- Building the frontend architecture with React to efficiently manage and orchestrate media workflows, while harnessing the capabilities of the MERN stack.
- Orchestrated software-centric media workflow management, skillfully leveraging Netflix Conductor and seamlessly integrating vendor APIs, while deploying a robust array of AWS cloud resources to innovate and fortify our groundbreaking product.

### Systech Solutions, Associate Software Engineer | Chennai, India

Nov 2021 – Mar2022

- Programmed "Dopplr," an innovative ML product, to streamline analytics and Machine Learning experiments for fraud detection incorporating algorithms such as LR, ANN, XGB, RandomF, and K-Fold using Python and its associated tools.
- Developed softwares to automate database code migration in designated databases, with metadata for smooth transitions in python.
- Optimized the SQL queries involving multiple complex tables, boosting the loading performance speed by 15%

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

Mar 2020 - Oct 2021

- Engineered a Product Life Cycle of an IoT model in Innoculate( a highly scalable SaaS product) for security and monitoring reasons
- Developed a software tool for increasing the overall efficiency of the IoT model by 5%, by handling software services using Python
- Revitalized system stability by 10% through proactive development of automation software, capitalizing on MongoDB for data collection and diagnosis, while employing Python-based analysis of 10 million data samples to statistically validate insights for decisive actions.

## PROJECT EXPERIENCE

### V'amass ( [v-amass.herokuapp.com](#))

May 2022-Present

- Developed a Social Media web application using MERN Stack and facilitated the web application with accounts, authorization, posting images, commenting, and watching timeline events of the connections
- Spearheaded software development using various tools and technologies of Javascript like React, hooks and redux for the frontend of the application, NodeJs for the backend and databases like MongoDB for structural and GCP for non-structural data storage

### Data Analysis on Fire Incidents

Nov 2022 - Dec 2022

- Analyzed JSON data using MongoDB on fire incidents that happened in a city (2018-2021) and brought out the correlation between the seasons and incidents that happened along with the district's trends over a period of time.
- Evaluated using Mongo Shell, Pymongo and Power BI for pre-planning the resources accordingly and also to be proactive.

### Drawbot (HACKATHON)

Aug2017

- Designed a self-operating mobile machine using C language that finds the best path to maneuver and to explore an unprecedented area to get a 2D layout out of it, making it a map-making robot which was programmed with wireless sensors

### 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 that works synchronized in 360° at maximum accuracy

## EDUCATIONAL EXPERIENCE

- Intellipaat- Full Stack MERN development course

Apr2022

- AWS- Builder Online series on AWS services

July 2022

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

Apr 2020

## CONFERENCE PRESENTATIONS

Presented a Paper in an International Conference on "ICIECS"( Information, Embedded and Communication System) associated with "IEEE" and "IET", on "Real-Time Power Monitoring using Microcontroller "organized by the St. Joseph College of Engineering in 2019

## ACHIEVEMENTS

- Securing 1st position in the Tech Quiz competition at SSN college's Invenite 3.0 Techfest, surpassing 50 strong competitors nationwide
- Leadership Excellence Award for outstanding Administration as a LEO club President by the International LIONS Club
- Best Outgoing sportsman from the College for clinching 25+ podium finishes in Athletics including a National Gold medal in Long Jump