Purandhar Sundaramoorthy

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EDUCATION

Binghamton University, State University of New York

Master's in Computer Science

Aug 2022 - Aug 2024

Design & Analysis of Algorithms, Database Systems, Cloud Computing, Web Programming, Design Patterns, Software Project Management, Computer Architecture, Operating Systems, Programming Languages

Anna University, Chennai, India

Bachelor's of Engineering in Electrical and Electronics

Aug 2015-May 2019

Computer Programming, Object Oriented Programming, Data Structures & Algorithms, Embedded Systems

TECHNICAL SKILLS

Languages: Python, Javascript, TypeScript, Java, C, C++, SQL Database: MongoDB, MySQL, PostgreSQL, Oracle Tools: TASMOTA, Linux, Git, Jira, Postman

Web-Development: HTML5, CSS3, React, Node.js, GraphQL Data: ETL, PowerBI, Tableau, Airflow, Python libraries Cloud & Containers: AWS, GCP, Docker, Kubernetes

PROFESSIONAL EXPERIENCE

Entertainment Technologies Inc., Software Development Intern | California, USA

July 2023 – May 2024

- Created an agile UI/UX for a media management product, seamlessly integrating REST API with React UI components and AG-Grid to deliver cohesive frontend 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 management and updates.
- Designed AWS cloud functionalities within the ecosystem, including S3 and AWS Glacier storage and innovative Technologies of AWS lambda for a triggering process, and gave support in maintaining server deployment in EC2 with Cloud technology.

Systech Solutions, Software Engineer | Chennai, India

Nov 2021 – Mar 2022

- Programmed Dopplr, an innovative AI/ML platform for risk & fraud Analytics using algorithms like LR, ANN, XGBoost, K-fold, and Random Forest, providing infrastructure for data management, and Machine learning experiments for business analytics.
- Interpreted the crucial task of assisting a Data Scientist to seamlessly transition their Analytics model to the production, while collaborating with the server-side team to integrate the analytics layer with the Dopplr seamlessly.
- Coded relational database migration software, integrating SQL metadata thereby reducing querying time and optimizing it by 20%

Apar Innosys, Associate System Analyst | Chennai, India

Mar 2020 - Oct 2021

- Engineered an Internet of Things (IoT)-based model on the scalable SaaS platform, Innoculate, for bank and warehouse security, integrating sensors, camera inputs, and cloud storage for remote monitoring and management.
- Developed a product with edge computing for real-time data processing and immediate smart device responses at the network edge.
- Improved system stability by 10% through analytical problem-solving, analyzing 10 million data samples with Python-based tools and data visualization for statistical modeling to optimize product performance and dependencies.

PROJECT EXPERIENCE

V'amass - Social Media Web Application

May 2022

- Developed a full-stack application with the MERN stack, featuring user accounts, authentication, image uploads, and timeline events
- Spearheaded development using JavaScript frameworks and libraries like React, Redux, and jQuery for frontend development, DOM manipulation, and AJAX calls. Managed communication between frontend and backend via REST API HTTP requests
- Implemented backend development on Node.js, with MongoDB for structured data storage and GCP for unstructured data (Blob storage) Collaborated with a peer for code reviews and functionality testing

Event Scheduling Service

June 2023

• Engineered a web service for meeting scheduling with flight and theatre booking capabilities, driven by availability and user selection, using JavaScript, Node.js, Express for middleware, MongoDB, React, Axios for API calls, and Tailwind CSS for seamless integration.

Data Analysis on Fire Incidents

Dec 2022

- Implemented Data engineering concepts and performed ETL on JSON data using a Non-relational database on fire incidents in Austin between 2018 and 2021. Identified correlations between seasons and incidents, as well as trends across districts, to ensure preparedness.
- Evaluated 10 million data samples using, Pymongo and Visualized data using Power BI for pre-planning and being proactive.

Chat Application Deployment on GCP

Aug 2019

- Deployed a Python Flask web server and MongoDB database on GCP VMs, containerizing with Docker for streamlined implementation.
- Hosted containerized live messaging microservices via Docker on a Kubernetes cluster using YAML files for deployment orchestration.

Robotic Arm - 360[^] movement with Automated Execution

Developed an Android application using MIT App Inventor to remotely control a robotic arm using Bluetooth, programmed in C.

CERTIFICATIONS

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

Apr 2022

ACHIEVEMENTS

- Awarded College's top athlete for achieving 25+ podium finishes in Athletics, including a National Gold Medal in the Long Jump
- Earned a Leadership Excellence Award for skillfully managing administrations as the President of a LEO club (324-A1)