Sowmya Cheedu

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EXPERIENCE

Full-stack Developer **September 2024 – Present**

Advanced Network Technology Solutions, Inc. *Fairfax, Virginia*

- Led **full-stack development** of the audit certification website, using JavaScript for the front end and Node.js for the back end, facilitating access for over 500 users and streamlining the certification process.
- Directly reporting to the CEO during the research of an **AI model** for automating auditing processes, analyzing 10 **machine learning algorithms** to identify the best options for future implementation.
- Produced comprehensive documentation and technical specifications for both the website and **AI model**, creating over 15 documents that ensure clarity and alignment with project goals.

Senior Consultant - Developer **July 2024 – Present**

Hoosier Community Network *Bloomington, Indiana*

- Led a team of 5 developers in building a full-stack web application for volunteer management at an NGO, employing the MERN tech stack.
- Designed **RESTful APIs** to integrate the front-end and back-end systems, enabling real-time updates for over 1,500 volunteers, and utilized **AWS (S3, EC2)** for cloud storage and deployment, ensuring scalability.
- Collaborated with stakeholders to gather requirements and translate into technical specifications, adding features like automated notifications and scheduling tools, improving resource allocation by 25%.
- Leveraged **Agile** methodologies and managed sprint planning with **Jira**, increasing delivery speed by 20% and reducing bottlenecks by 15% through daily stand-ups and retrospectives.

Software Developer **August 2022 – May 2024**

Residential Programs & Services *Bloomington, Indiana*

- Developed and maintained a web application for the university dining organization using Java and JavaScript, streamlining the meal ordering process and increasing student engagement by 40%.
- Implemented cloud solutions on AWS, utilizing services such as **Lambda and S3**, to enhance application scalability and reliability, reducing server costs by **$5,000** annually and improving response times by 20%.
- Integrated **AdTech tools** to manage and optimized digital marketing campaigns using **A/B testing**, resulting in a 30% increase in promotional reach and 300 additional meal plan sign-ups over the academic year.
- Partnered with UX designers and product managers to create a dining app that enhanced meal ordering, boosting user engagement and satisfaction ratings for over 5,000 students.
- Engineered **SQL-based** reporting tools to analyze dining trends and student preferences, delivering actionable insights that optimized menu planning and inventory management processes, contributing to **$10,000** annual reduction in food waste.

Programmer Analyst **September 2021 – July 2022**

Cognizant Technology Solutions *Hyderabad, India*

- Wrote clean, maintainable backend code in Python and Node.js, leading to a 25% reduction in bugs during QA through thorough code reviews.
- Developed **complex SQL queries** to improve data retrieval efficiency, achieving a performance increase of 40%, which enabled real-time analytics for critical business decisions impacting over 200 client projects.
- Engineered a **microservices architecture** that supported **scalable web services**, reducing system downtime by 30% during peak usage hours and facilitating seamless integration across platforms.
- Integrated secure web services and RESTful APIs to enable data exchange between legacy systems and modern applications, processing over 1 million transactions monthly while ensuring compliance with industry security standards.

Developer **June 2019 – July 2019**

Coign Consultants *Hyderabad, India*

- Oed Java-based microservices to enhance application performance by 20%, contributing to a smoother user experience for over 10,000 active users weekly.
- Coordinated with senior developers to design RESTful APIs, improving data retrieval speed by 15% and reducing server response times by implementing efficient algorithms and caching strategies.
- Implemented and refactored key backend components by writing 500+ lines of Java code, increasing code maintainability by 25% and ensuring seamless integration with existing systems through rigorous testing and debugging.

PROJECTS

Home Credit Default Risk 🔗 | *Machine Learning, Python, Data visualization*   **January 2023 - May 2023**
- Built three neural networks using PyTorch Lightning for classification in the final phase of the HCDR project.
- Conducted comprehensive Exploratory Data Analysis (EDA) with data distribution visualizations and applied insights for feature engineering, achieved 90% model accuracy through optimization techniques and tailored loss functions.

Game Planner 🔗 | *AWS, React*   **January 2023 - May 2023**
- Built a sports room and court reservation website using the MERN Tech Stack (MongoDB, Express, React, Node.js), led web development enhancements and database optimization, achieving a 35% reduction in page load time.
- Employed custom databases and APIs, integrated web sockets for real-time updates, hosted the front end on AWS, and applied Agile methodology with JIRA for efficient project management.

Time Series Prediction model for the Prediction of COVID-19 🔗 | *Python, RNN*   **June 2021 - July 2021**
- Designed a model for predicting the number of COVID-19 patients and forecasting future cases.
- Deployed LSTM (Long Short-Term Memory) network to analyze a dataset of India's COVID-19 cases in 2020, comprising 2000 rows with attributes including date, state, death count, and cases count.

SKILLS

Technical Skills: React, Business Intelligence, Software Development Life Cycle (SDLC), CRM, Agile, Statistical Modeling, AWS, A/B testing, AI, CI/CD, Restful services, microservices, DevOps Practices
Languages: Python, SQL (MySQL, Postgres), Java, JavaScript, HTML, CSS
Tools: AdTech (Demand-Side Platforms), Excel Modeling, Power Apps, Postman, Docker, VS Code, Git, JIRA, JupyterHub, Heroku

EDUCATION

Indiana University Bloomington   **August 2022 – May 2024**
Masters in Computer Science (GPA: 3.7)   *Bloomington, Indiana*

Sreenidhi Institute of Science and Technology   **August 2017 – July 2021**
Bachelors in Computer Science (GPA: 3.5)   *Hyderabad, India*