SOWMIYANARAYAN SELVAM

+1(732) 322-5923 ⋄ New Brunswick, NJ

selvamsowmiyanarayan@gmail.com ⋄ Linkedin ⋄ Github

EDUCATION

- **Master of Computer Science**, Rutgers University - New Brunswick, NJ, USA.   September 2022 - Present
  Grade: 3.83/4.0
  Relevant Coursework: DSA, Operating Systems, Databases for Data Science, Intro to AI.
- **Bachelor of Computer Science and Engineering**, Amrita Vishwa Vidyapeetam, TN, India.   July 2018 - August 2022
  Grade: 8.72/10.0

SKILLS

- **Languages and Frameworks:** C, C++, Python, Java, PHP, Laravel, Flask, JavaScript, Node.js, React.js, HTML, CSS.
- **Tools and Technologies:** AWS, SQL, MongoDB, Serverless, Dockers, Containers, Jenkins, JIRA, Stata, Unreal Engine.
- **Platforms:** Windows, Linux, macOS.

EXPERIENCE

SDE Intern   June 2023 - July 2023
SPAN Technologies [Tech: NodeJS, SES, SQS, Lambda, MongoDB, DynamoDB, EventBridge]   *Coimbatore, India*

- Conceptualized and executed a collaborative project with a 5-member development team to deliver tax software for TaxBandits, a tax e-filing service provider.
- Implemented a mail scheduling module for the project's next phase, saving 15 hours of human resources for the company.

Data Analyst   February 2023 - July 2023
Department of Agricultural, Food, and Resource Economics, Rutgers. [Tech: Stata, Excel, Word]   *New Brunswick, NJ*

- Cleaned dataset of 1247 survey entries using Excel and correlated data by producing reusable code in Stata and improved the efficiency of tabulating the data by 50%.
- Co-authored a report outlining the data analysis methodology adopted and the inferences interpreted through data visualization.

ACADEMIC PROJECTS

Bidsy [Tech: HTML, CSS, JavaScript, JSP, Java, MySQL].

- Built an online auction system with optimized automatic bidding, achieving a 40% reduction in bid comparison computations and ensuring efficient user interactions.
- Developed an interface connected with a relational database that utilizes search and sort functionalities for data retrieval.

Customer Care Call Optimization [Tech: HTML, CSS, Flask, Librosa, Pyaudio, Sklearn].

- Designed a web-based framework that enables an emotion analysis model to perform emotion-based call routing and automatic grading of service professionals.
- Achieved 84.72% accuracy using a neural networks classifier to identify emotions from audio and visualized 10 epochs utilizing a model for Text sentiment analysis from the complaint received from the customer through a chatbot.

Elective Management System [Tech: HTML, CSS, JavaScript, NodeJS, ReactJS, Jest, GCP, MySQL, JIRA].

- Facilitated 4 peers throughout the development, testing, and deployment of a web application by sharing progress through an agile project management tool.
- Delivered automated elective assignments for students, overcoming the existing system's shortfalls and reducing processing time from a couple of days to 2 hours.

RESEARCH

Analysis and Testing of Containers, Springer Series[In press].

- Conducted a study on the applications and advantages of containers in running applications, showcasing the portability across platforms and consolidation of dependencies.
- Demonstrated superior long-term performance and consistency of container-based systems through data analysis of dataset generated by tracking 500k network responses and requests.