SYED MARUFUL AZIZ

email : marufaziz95@gmail.com | mobile : +44 7778 111 525

LANGUAGES

- Java, Python, JavaScript, C#
- HTML, CSS, MATLAB, Bash
- JSON, Protocol Buffers

TECHNOLOGIES

- Amazon Web Services (EC2, S3, IAM, Lambda)
- PostgreSQL, MongoDB, MySQL
- Docker, Nginx
- Git, Azure DevOps, GitLab

METHODOLOGIES

- Agile, Scrum, Kanban

EDUCATION

Bachelor of Engineering (Electrical & Electronic) | 2017

First Class Honours
The University of Adelaide
Adelaide, Australia

Bachelor of Computer Science | 2017

The University of Adelaide
Adelaide, Australia

HONOURS PROJECT

Smart Mirror With Raspberry Pi

Analysed the performance of facial recognition algorithms (MATLAB), and developed a GUI that integrated face and voice recognition systems (Python).

PERSONAL PROJECTS

React App With Redux and JWT

To learn redux and authentication, I developed a To-Do List app using the MERN stack with Redux for state management and employed JSON Web Tokens for authorisation.
https://github.com/maruf317/mern-todo-list

EXPERIENCE

SOFTWARE ENGINEER

SILENTIUM DEFENCE | ADELAIDE, AUSTRALIA | FEBRUARY 2022 - OCTOBER 2023

Automated key parts of the Space Surveillance Data as a Service product, and developed and improved the proprietary passive-radar (PR) simulator. This role is customer facing and requires frequent liaison and collaboration.

- Improved performance via automation and cloud technologies (AWS S3, Python)
  - Reduced the time to publish data of a DaaS product from an average of 6 hours to 5 minutes (98.5% improvement)
  - Reduced data analysis time from 4 hours to 10 mins (96% improvement)
- Designed and migrated to a new cloud-based database solution. This streamlined queries, improved data integrity, removed duplicity and allowed multiple users to access the latest data simultaneously (PostgreSQL, AWS EC2, Python, sqlAlchemy).
- Improved simulation accuracy by solving data transformation induced latency. This required evolving the system interface to adhere to the IEEE DIS standard (JavaScript).
- Extended the system and developed an API library to allow customers to send “command and control” messages to the PR simulator from their system (Python, C++).
- Developed a subscriber module for the customer system (C++) and performed a live demonstration to a global audience of the end-to-end integration of their system with the PR simulator. Received high praise and secured funding to continue the project.
- Developed new features on the basis of customer feedback to improve the usability and configurability of the product (Javascript).

SOFTWARE ENGINEER

SAAB AUSTRALIA | ADELAIDE, AUSTRALIA | AUGUST 2019 - NOVEMBER 2021

- Developed a new UI creation module to streamline the production of new UI controls, remove the need for XAML development and provide greater UI configurability (C#).
- Bolstered security and increased computational efficiency for the customer by replacing a direct database connection with an API (C#, JavaScript, SignalR).
- Conceptualised, developed and delivered a performance enhancing feature that reduced execution time by 96%, and resulted in a more responsive user experience (C#).
- Proposed and delivered a more streamlined product configuration capability on the basis of customer feedback (C#) which reduced product deployment times by up to 70%.
- Drove project direction by examining several candidate technologies (gRPC, SignalR), developing prototypes, and presenting a recommendation that received approval.

SYSTEMS ENGINEER

SAAB AUSTRALIA | ADELAIDE, AUSTRALIA | FEBRUARY 2018 - JULY 2019

- Derived clear specifications from customer needs and developed a wireframe of the system (Balsamiq), which impressed the clients and helped win the contract worth $1M.
- Recreated unexpected behaviours observed in a live CCTV system by writing scripts to simulate user input (Python). Analysed Wireshark traces to diagnose the problem.
- Delivered requirements after leading several customer workshops to achieve consensus.