Vasu Agarwal

+91 9952496611 | vasu2995@gmail.com | vasuagarwal29 | vasuag29

WORK EXPERIENCE

SOFTWARE DEVELOPER | Siemens Healthineers — Bangalore | July 2018 – Present

- **Simulator for a large healthcare product**
  - The simulator facilitates trial and testing of prospective product features, potentially impacting over **10,000 customers globally**. It empowers top management to gain crucial product performance insights and engenders planning and conceptualization **cost reduction by 50%**.
  - Developed a windows desktop app using **WPF, MVVM, .NET Framework** and **SQL server**, collaborating in an agile team of 7 and contributing in various phases of SDLC.
  - Created unit tests for production code using **MSTest** framework with **90% code coverage**.
- **Web Portal for product utility and analytics** used by 2 department verticals, **5000+ users**
  - Developed a website with **JavaScript**, **TypeScript** using **MEAN (MongoDB, Express, Angular, NodeJS)** stack and deployed it on **Azure** by creating an Azure DevOps **CI/CD pipeline**, working in a team of 3.
  - The website facilitates product **utility and accessibility increase by 8x**, and therefore **4x faster strategic decision making**.
  - Deployed **docker containers** using **Azure Container Instances (ACI)** and also secured the application by adding internal authentication using SAS tokens.
  - Developed a desktop app using **.NET Core**, **SocketIO** and **SignalR**, which is in-turn consumed by the web portal.
- **Web API app for product accessibility** for internal use by over **10 teams**
  - Built a web app using **ASP.NET, C#** and facilitated APIs for accessing an existing desktop app. Software **accessibility increased by 5x**.
  - Programmed **Python** scripts for automating web API calls.
  - Re-engineered existing software written in **C#** and automated it by employing windows batch scripts, resulting in **80% manual effort reduction** for users and testers.
- **Innovated and proposed solutions**, participating in internal hackathons
  - Developed a **machine learning** model for predicting healthcare equipment failure from equipment-generated logs using **Python** and **Natural Language Processing (NLP)**.
- Used **Team Foundation Server (TFS)** and **GIT** for version control across projects.

SOFTWARE ENGINEERING INTERN | R Systems — Noida | May 2017 – July 2017

- Created a native addon for **NodeJS** using **C++**. The addon makes use of Caesar cipher for obfuscating JavaScript code and allows the company to hide source code while delivering solutions to customers.

EDUCATION

B.TECH. COMPUTER SCIENCE AND ENGINEERING (CGPA: 8.1/10) — July 2014 – May 2018
Vellore Institute of Technology (Vellore, Tamil Nadu)

ACHIEVEMENTS AND CERTIFICATIONS

- Machine learning project on **Fake News Classification**
  - Created a pipeline of 5 classifiers (**Naive Bayes**, **Logistic Regression**, **SVM**, **Stochastic Gradient**, **Random Forest**) from the **scikit-learn** library and used the model with best F1 score.
  - **Published** a research paper titled Analysis of Classifiers for Fake News Detection in the ScienceDirect, Elsevier (Publication Link).
- Won **1st place** in Mozilla Firefox OS Hackathon (Built a music quiz app using HTML and JavaScript).
- Certificate of **Machine Learning** by Stanford University.
- Certificates of **Neural Networks and Deep Learning** / **Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization** / **Structuring Machine Learning Projects** / **Convolutional Neural Networks** by deeplearning.ai.