Himanshu S Joshi

(+1) 812-369-0190 | hsjoshi28@gmail.com | linkedin.com/in/hsjoshi28 | github.com/hsjoshi28

Education

Master of Science in Computer Science **Jan 2021 – Dec 2022**
Indiana University, Bloomington, IN CGPA: 3.6/4.0

Bachelor of Engineering in Computer Engineering **Aug 2014 – May 2018**
Savitribai Phule Pune University, Maharashtra, India CGPA: 7.78/10.0

Technical Skills

Languages: Python 3, Java 15, C, C++, SQL, HTML, CSS, React JS, Angular 7
Frameworks: Hibernate, Spring MVC
Cloud: AWS (EC2, S3), AWS Certified Solutions Architect – Associate (SAA-C02), Kubernetes, JetStream2
Databases & cache memory management: SQL Server, MongoDB, Redis cache, MySQL
Tools: Git, Agile, Jenkins, JIRA, Scrum, TortoiseSVN, Docker, JMeter, Zuul, Heroku, SonarLint
Libraries: Dash, Plotly, Numpy, Pandas, PyTorch, TensorFlow, TensorBoard, Scikit-learn, Mapbox GL

Professional Experience

Indiana University, Bloomington, IN – Research Assistant **May 2022 – Dec 2022**

- Designed and developed a dashboard to visualize utility disconnections data using different parameters for all states in the US using the Python Dash and Plotly libraries.
- Integrated the app with Mapbox GL, and deployed the application on the server.
- Technologies used: Python 3, Dash, Plotly, Pandas, Jetstream2, Mapbox GL.

Indiana University, Bloomington, IN – Associate Instructor **Aug 2021 – May 2022**

- Teaching Assistant for course CSCI-A201/A597: Introduction to Programming 1 - Python Language.

Virtusa, Bengaluru, India – Associate Software Engineer -Technology **Jun 2018 – Oct 2020**

- Developed software for a centralized ticketing system for British Telecom using Hibernate framework, Spring MVC in Java 8, Oracle 12c SQL Database, and created RESTful APIs thereby replacing the legacy application.
- Created a new in-memory data structure store named Redis Cache for the application.
- Fixed a significant security flaw in the application related to directly hitting the URL in the browser and displaying the data. Debugged the application in production by remotely connecting to Linux servers.
- Authored a clean code checklist for code reviews and maximum code coverage to improve codebase health and set homogenous team coding standards.
- Technologies used: Java 8, Spring MVC, Hibernate, HTML, CSS, Angular, SQL, SonarLint, HPQC, JIRA, Tortoise SVN, Git, Redis cache, Oracle SQL 12c, Shell scripting, Postman.

Projects

Terra: A Weather Forecast App (Code: github.com/hsjoshi28/terra) **Jan 2022 – May 2022**

- Created an application for weather/storm forecasting using NexRad AWS data, and MERRA-2 Data.
- Created the backend microservices in Java, containerized each service using Docker, deployed on Kubernetes cluster, tested using JMeter, and constructed the CI-CD pipeline using Jenkins in JetStream2 Server.
- In final phase, Rancher was installed, and deployed Custos over Rancher using one master and two slave nodes.
- Technologies used: Java 15, Python 3, Spring Boot, Docker, Jenkins, Kubernetes, RabbitMQ, Postman, Zuul.

Prosper: A Learning Management System (Code: github.com/hsjoshi28/software_engineering) **Jan 2022 – May 2022**

- Designed the system, and the use cases for the application and acted as a SCRUM Master for a team of 4.
- Created microservices in Java, using MySQL database and connected the application to multiple PaaS APIs.
- Technologies used: Java 15, Spring Boot, Hibernate, Mail Server, Twilo (For sending messages), 2 MFA using Duo.

Cat Dog Detection (Kaggle: kaggle.com/c/dogs-vs-cats) (Code: github.com/hsjoshi28/cadod) **Aug 2021 – Dec 2021**

- Worked on augmenting images, developing Homegrown linear and logarithmic models, EDA, PyTorch model for regression using MLP, multi-headed cat-dog detector using the OOP API with loss function as MSE + CXE.
- Technologies used: Python 3, Pandas, PyTorch, Numpy, TensorFlow, TensorBoard, Scikit-learn, Plotly.