## HARSHA SIDDAGANGAIAH

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### **EDUCATION**

M.S. Computer Science | GPA: 3.82/4.0

Sep 2021 - May 2023

University of Oregon, Eugene, OR, USA.

#### **B.E. Information Science | GPA: 3.51/4.0**

Aug 2014 - June 2018

Visvesvaraya Technological University, BMS Institute of Technology & Management (BMSIT), Bangalore, India.

**Relevant Courses:** Software Architecture & System Design, Algorithms, Data Structures, Databases, Object Oriented Programming, Web Programming, Data Science, Machine Learning, Artificial Intelligence, Cloud Computing, Data Warehousing & Data Mining.

## **TECHNICAL SKILLS**

**Programming Languages:** Python, Java, Kotlin, C++, C, JavaScript.

Databases & IDEs: PostgreSQL, MongoDB, OracleDB, MySQL, SQL Server, SQLite, Spyder, Eclipse, PyCharm, Jupyter, SAP.

Libraries: ReactJS, jQuery, Scikit-learn, Keras, Pandas, NumPy, Matplotlib, NLTK, StatsModels.

Frameworks: Django, Flask, Node.js, Microservices, REST APIs, PyTorch, PySpark, J2EE, JDK, JSP, JSF, Java Servlets.

Developer Stack: HTML5, CSS3, Bootstrap, AJAX, JSON, XML, SOAP, AWS, CI/CD pipelines, Microsoft Azure Cloud, Linux, Docker, Kubernetes, Github.

Certifications: Oracle Database SQL Certified Associate, Oracle Certified Associate, Java SE7 Programmer.

#### WORK EXPERIENCE

#### Teaching Assistant at the University of Oregon (Eugene, OR)

Sep 2021 - present

• Python Programming (CS 210 & CS 211), Algorithms & Data Structure (CS 315), Database Processing (CS 451): Collaborated with Professor Dr. Michal Young, Dr. Lei Jiao, and Dr. Christopher Wilson and led the Junior and Senior year tutorials and labs. **Responsibilities:** Conducting code demonstrations, holding office hours, designing quizzes, and grading assignments and projects.

# Associate Software Engineer at Atos Syntel Private LTD (Bangalore, India)

Aug 2018 - Aug 2021

Atos Syntel aims at optimizing Enterprise Resource Planning systems by 2x for retail industries such as Volkswagen and Volvo.

- Developed and deployed IDoc Maps in IBM Sterling Integrator to load the file onto the SAP ERP system. The implementation **enhanced the time efficiency by 19%** for receiving and processing orders in the SAP system.
- Implemented various communication protocols, including VAN, OFTP2, and AS2, for configuring end-to-end communication between clients. The IDoc flow **increased by 37%, leading to prominent business growth** for automobile clients.
- Involved in the complete software development lifecycle, contributing to a **30% reduction** in project completion time through efficient requirements gathering, analysis, testing, and deployment.

Technology Skills: Python, SQL, JavaScript, Microservices, REST APIs, AJAX, JSON, SOAP, AWS, Linux.

## Software Developer Intern at HereAround Technologies Pvt Ltd (Bangalore, India)

Ian 2018 - Feb 2018

• Engineered best of kind plugins and themes on the WordPress platform, achieving a **4x better user experience**. Employed this content management system to construct highly customized business websites for our clients.

### **PROJECTS**

### Full stack web application to Support Self Directed Learning

- Upgraded the learning procedure of students by designing a full stack **Python Django application** that facilitated interactive learning, with a **15% increase** in student engagement in discussions and doubts clarification.
- Chartered a platform to learn different programming languages through web implementation. Students at BMSIT use this portal. Conducted assessments and devised new operational processes that led to a 17% increase in student productivity.

## **Android App for Corporate Food Management**

- Created a **custom mobile interface** to allow corporate employees to view food menus. Effective management of all the guest lists and inventory through the app **accelerated sales by 25%**.
- Formulated this comprehensive Android app using Java frameworks, which maximized virtual accessibility for users by 100%.

# **Data Analysis of Digital Payments and Fraud Detection**

- Performed in-depth data analysis to identify trends of fraudulent transactions in a transaction dataset. Productionized models like **XGBoost and Logistic Regression** to predict fraudulent transactions with an **accuracy of 81%** in a financial institute.
- Utilized GridSearchCV for cross-validation to achieve accuracy greater than 10% above the baseline model.

#### Game of Life in 3D

- Designed a **3D version** of a game using the **MPI and OpenMP** programming paradigms.
- Accelerated the processing time by using the benefits of parallel computing, resulting in an **improvement of 7x in performance** compared to the sequential version of the game.