# Abhishek M. Shastry K.

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My varied experiences, from developing robust backend systems to creating intuitive user interfaces, have equipped me with a holistic understanding of software engineering. Motivated by a passion for innovation, I am keen to delve into the field of full-stack development.

### **EDUCATION**

The University of Iowa (Ulowa)

Iowa City, IA, USA

Master's in Computer Science, CGPA: 3.77/4.00

Aug. 2023 - May 2025

Alva's Institute of Engineering and Technology (AIET)

Mangalore, KA, India

B.E. in Electronics and Communication Engineering, CGPA: 8.74/10.00

Aug. 2017 - Aug. 2021

# **EXPERIENCE**

University of Iowa

Iowa City, IA, USA

Research Assistant

Aug. 2023 - Dec. 2023

• Implemented DOM optimizations using vanilla JS, fostering a 2x increase in both code efficiency and application performance

• Revised animation control functionalities for a weather forecast website, through systematic refactoring, eliminating hard-coded elements, and enhancing overall code readability. This decreased overall code size by 25%

# HealthEdge Software

Bangalore, KA, India

Software Engineer (Student Intern for first six months)

Jan. 2021 - July 2023

- Played a pivotal role in a Kubernetes project, focusing on the containerization of HealthEdge products, leading to a 3x increase in deployment efficiency and enhanced scalability
- Collaborated with cross-functional teams to implement automated branch creation through Jenkins, achieving a 75% reduction in release process time and enhancing workflow efficiency
- · Actively engaged in Kanban-driven software development, managing and prioritizing Kanban tickets to ensure streamlined project flow
- Mentored HealthEdge interns by providing comprehensive product knowledge and technical guidance

# **SKILLS**

Programming/Web Development: Java, C, C++, Python, JavaScript, React, Node.is, HTML/CSS

Developer Tools: Kubernetes, Docker, Shell (Bash/Zsh), Git/GitLab, IntelliJ IDEA, Visual Studio Code, Oracle SQL Developer, Oracle WebLogic Server, Jenkins, Jira, SonarQube, Gatling, Natural Language Toolkit

Operating Systems: Windows, Linux, CentOs, Raspberry Pi OS

Miscellaneous: Spring Boot, Hibernate, Apache Camel, Apache ActiveMQ, JPA, SOAP, REST Web Services, Embedded C, Scikit-learn

### **PROJECTS**

# Micro Weather Station [mws-project.netlify.app]

Mangalore, KA, India

Alva's Institute of Engineering and Technology

Jan. 2021 - May 2021

- Built a micro weather station that measures various environmental variables and uploads the measured data into a server for processing
- The system was built using a Raspberry Pi which interfaced various sensors to measure temperature, humidity, soil moisture, ultraviolet radiation, air pressure, and air quality
- Enhanced measurement accuracy by 20% and cut overall operational costs by 15% compared to existing Raspberry Pi-based micro weather stations. This was achieved through a specialized printed circuit board and cost-effective high-accuracy sensors
- Developed an android mobile application that gives users the ability to perform real-time analysis on processed data from multiple micro weather stations. The application is published in Amazon Appstore: MWS Weather App

## Automatic detection of various emotions from textual comments and feedback

Mangalore, KA, India

TCS iON remote internship project

Oct. 2020

- Developed a machine learning algorithm utilizing various text classifiers and preprocessing techniques to detect different types of emotion contained in a collection of English sentences or a large paragraph
- Analyzed and compared the effectiveness of multiple vectorization strategies (Count Vectorizer and TF-IDF Vectorizer) with multiple models (Multinomial Naive Bayes and Logistic Regression)
- Obtained robust performance using Count Vectorizer and Logistic Regression model, considering key evaluation metrics such as Cross-Validation score, Accuracy, Precision, Recall, and F1 Score

#### **ACHIEVEMENTS AND CONTRIBUTIONS**

2022 Recognized as a Quarterly Star Performer at HealthEdge | 2019 Semi-finalists in India Innovation Challenge Design Contest organized by Texas Instruments | 2021 Organized workshop on Python for university freshers under Envision Lab, AIET |