

Siddhi Kabadi

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EDUCATION

Santa Clara University

June 2026

Bachelors of Science in Computer Science (concentration in Security), Economics

COURSEWORK & CERTIFICATIONS

Courses: Data Structures, Theory of Algorithms, Embedded Systems, Discrete Math, Logic Design, Web Development, Databases, Calculus, OOP, Computer Security, Operating Systems, Computer Networks

Certifications: AWS Certified Cloud Practitioner (Expected August 2024)

SKILLS

Languages: C/C++, Python, Java, JavaScript/TypeScript, HTML/CSS, SQL, PHP, \LaTeX

Tools: Git/GitHub, Webpack, VS Code, IntelliJ CLion/PyCharm/IDEA, Jira, Confluence, Tableau, Docker, Postman

Frameworks: React, Node.js, Svelte, Django, jQuery, Express.js, TensorFlow

Libraries: bleach, cryptography, Fernet, pandas, NumPy, Matplotlib, Scikit-learn, VaderSentiment

RESEARCH & PUBLICATIONS

DOxy 2.0: A Dissolved Oxygen Monitoring System (IoT system)

MDPI Sensor Networks Journal

Research under Prof. Shaghaghi (Ethical, Pragmatic, and Intelligent Computing Laboratory)

Aiming to publish version 2.1 which constructs a comprehensive dashboard for cross-compatible IoT agricultural projects. This version incorporates advanced security measures, including enhanced encryption standards, and integrates a detailed heat map for precise visualization of oxygen level distributions across farms.

EXPERIENCE

Software Engineer and Security Intern | Sky IT Services (Subsidiary of GBCS Group)

June 2024 – Present

- Engineered secure API endpoints with Django to improve deployment efficiency by 30%, to enhance security by 40%, and to increase data protection by 50% with the application of AES and RSA encryption
- Optimized security by 40% through streamlined RBAC with bcrypt and JWT
- Reduced vulnerabilities by 38% and prevented SQL and XSS attacks by crafting regular expressions to sanitize inputs with Python's Re and Bleach libraries
- Employed Flask-Limiter and decreased brute force attack risk by 25% through restricted login-attempts and rate-limiting per IP address

IoT Researcher | Ethical, Pragmatic, and Intelligent Computing Laboratory @ SCU

May 2023 – Present

- Developed a IoT device data visualization dashboard to help improve data analysis and presentation by 40% using Node.js, Docker, and TimescaleDB
- Increased real-time data processing speed by 30% by configuring backend communication with HTTP requests and WebSocket for live data display
- Boosted web application performance by 20% through server side rendering with Svelte

PROJECTS

Stock Price Prediction System | TensorFlow, Python

July 2024

- Designed a stock price prediction system using LSTM neural networks that includes historical data from Yahoo! Finance and real-time sentiment analysis from News API. Incorporating sentiment led to a 15% improvement in forecasting accuracy
- Built a graphical visualization that demonstrates a stock's adaptability to market fluctuations by architecting a data pipeline leveraging the yfinance and vaderSentiment libraries to preprocess financial and news data, and deployed the machine learning model with Python, TensorFlow, and Keras

Taskbuddy | SQL, PHP, SQLite Database, JavaScript, HTML/CSS

March 2024

- Created a web application with user authentication, task management, and progress tracking using HTML, CSS, JavaScript and PHP
- Integrated robust security measures and data integrity with hashed passwords, session management, and SQLite database