

# Sai Nikitha Ravuri

Buffalo, NY | [LinkedIn](#) | 14214 | [sravuri3@buffalo.edu](mailto:sravuri3@buffalo.edu)

## INTERNSHIPS

### Capella Infotech Solutions

Developer Trainee

Chennai, India

February 2023 – June 2023

- Analyzed system requirements and ensured alignment with project goals, streamlining development processes and reducing project delays by 25%
- Collaborated with a team of 7 developers to revamp user experience and interface, resulting in a 20% increase in user engagement and a 15% reduction in bounce rate
- Executed a detailed suite of 150+ test cases, identified 95 critical defects, and collaborated with developers to expedite issue resolution, reducing bug fix time

## PROJECTS

### Priority Scheduler in Operating Systems

April 2024

- Developed and integrated a high-efficiency priority scheduler over a basic FIFO scheduler in Pintos, utilizing synchronization techniques and kernel threads; increased scheduling performance by 35% through the implementation of a heap data structure.

### Python Image Forgery Detection Using D5 and OpenCV

August 2022

- Created and deployed a sophisticated image forgery detection platform leveraging Python, WAMP Server, and MySQL 5.6, resulting in a 50% increase in detection efficiency and a 30% improvement in accuracy.
- Engineered an advanced image forgery detection system using Python, MD5 hashing, and OpenCV, achieving a 95% accuracy rate and reducing detection time by 40% with instantaneous confidence scores indicating tampering likelihood.

### Smart car parking using Image Processing | Python, OpenCV, IoT, Cloud Computing

April 2022

- Designed a real time parking occupancy detection system with Python, OpenCV, and the Hough Line Transform for accurate image analysis
- Configured NGINX and Amazon EC2 for cloud-based deployment, ensuring scalability, accessibility, and a web server displaying live parking spot availability.

### Fingerprint-Based Biometric Attendance System Using Arduino

August 2021

- Engineered a sophisticated biometric attendance system featuring fingerprint recognition; streamlined attendance tracking and reduced manual errors by 90%, capturing attendance data instantly and displaying it on an LCD screen.
- Implemented a secure attendance system with Arduino and biometric fingerprint sensors, achieving 99% precision; eliminated fraudulent entries and saved 45 hours of administrative time per month.

## EDUCATION

### University at Buffalo

Master of Science in Computer Science

Buffalo, NY

August 2023–December 2024

### Vellore Institute Of Technology ,Amaravathi

Bachelor of Technology in Computer Science with specialization in Networking and Security

India

August 2019– May 2023

## SKILLS

**Languages:** Python, Java, SQL, C++

**Machine Learning Tools:** Keras, Pandas, Numpy, Matplotlib, TensorFlow, Scikit-Learn, Convolutional Neural Networks (CNNs), Natural Language Processing (NLP)

**Development Tools:** React.js, Node.js, React Native, Tailwind CSS, Amazon Web Services, PostgreSQL

## CERTIFICATIONS

- SQL (Advanced) - HackerRank  
Successfully cleared the assessment, demonstrating advanced SQL skills (August 2024).
- Led a data visualization project simulation with Accenture North America, analyzing 7 distinct datasets and creating actionable insights; developed a comprehensive 20-slide presentation that streamlined decision-making for stakeholders in a hypothetical scenario.
- Mastered generative AI techniques such as LLM, GAN, and Transformers in the OCI AI Foundations course, which enhanced project contributions and facilitated the development of three innovative AI solutions for client engagements.
- Earned Data Analytics Essentials certification from Cisco Networking Academy, specializing in data sourcing and transformation processes; constructed a comprehensive project portfolio that utilized 2 complex datasets, reinforcing analytical proficiency in real-world applications.
- Qualified for the second round in Code Fiesta-QHUB 2020, organized by VIT AP, securing a merit certificate and demonstrating strong coding and problem-solving abilities