

YASH VENKATESH BITLA

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Objective: Software Engineer full-time roles starting January 2024

EDUCATION

University of Southern California , Los Angeles, CA	Jan 2022-Dec 2023
Master of Science in Computer Science	CGPA: 3.55/4
Courses: Artificial Intelligence, Analysis of Algorithm, Web Technologies, Information Retrieval	
University of Mumbai , Mumbai, India	Aug 2017-May 2021
Bachelor of Engineering in Computer Science	CGPA: 4/4
Courses: Data Structures, Machine Learning, Object Oriented Programming, Database Management	

TECHNICAL SKILLS

- Programming Languages - Python, Java, C++, HTML, CSS, JavaScript
- Frameworks & Tools - PyTorch, TensorFlow, Docker, Kubernetes, Node.js, ReactJS, AngularJS, REST
- Database and Cloud - MongoDB, MySQL, Hadoop, Firebase, GCP, AWS, PostgreSQL

WORK EXPERIENCE

SoFi (Galileo Financial Technologies) , USA, <i>Software Engineer Intern</i>	May 2023-Aug 2023
<ul style="list-style-type: none">• Enhanced fraud detection by implementing a program-level, configurable feature in Python and Flask, preventing unauthorized transactions by identifying name mismatches in ACH transactions.• Developed the name mismatch service in shadow mode, leveraging Kubernetes and RabbitMQ, to process incoming ACH transactions within 1% of the existing processing time.• Built a data dashboard for collecting valuable insights and analysis using Splunk and DynamoDB.	
Integrated Media Systems Center Lab , USC, <i>Graduate Research Assistant</i>	May 2022-May 2023
<ul style="list-style-type: none">• Research focused on Object Detection and Counting Challenges in Real World Street Monitoring: Case Study of Homeless Encampments under Dr. Seon Kim. (Selected Publication)• Adapted the YOLOv5 model to detect homeless encampments in an occluded, illuminated etc noisy environments with a precision of 0.75 and counting error ratio of 0.13.• Implemented CSRT, KCF, and MIL trackers using OpenCV to track multiple objects for a non-static camera.	
Development Monitors LLC , Arlington, USA, <i>Machine Learning Engineer</i>	Jan 2021-Dec 2021
<ul style="list-style-type: none">• Trained a Feature Pyramid Network on geospatial satellite imagery, enhancing building roof types (mud, metal, clay) detection accuracy from an mIoU of 0.58 to 0.74.• Implemented ML-based regularization and polygonization (Link) for visually pleasing building outlines.• Created shapefiles with roof detection coordinates and rendered them on web-based mapping software.• Engineered an end-to-end pipeline covering detection, regularization, shapefile generation, and web-based community map rendering, resulting in a 2x increase in time efficiency.	
Young Women's Christian Association , India, <i>Software Engineer Intern</i>	Jan 2020-Oct 2020
<ul style="list-style-type: none">• Identified problems in YWCA's event management and led an android development team that built a mobile application (Link) to improve their operations.• Integrated dynamic lists with recycler view to display different events and created an admin control page.• Boosted click rates by 133% and increased event registration by 200%.	

PROJECTS

Event Finder Application (Link)	Feb 2023-Mar 2023
<ul style="list-style-type: none">• Developed a web page using AngularJS, Node.js and Flask that interfaces with the Ticketmaster API to retrieve event information based on user search input.• Improved event search functionality by integrating Google Maps and IPinfo.io geocoding APIs.• Incorporated a search radius and real-time user location tracking to provide more relevant results.	
Drone Route Planning – ISRO (Smart India Hackathon) (Link)	Jul 2020-Aug 2020
<ul style="list-style-type: none">• Designed an algorithm to plan most efficient drone route and schedule, considering multiple constraints like geography, drone battery, fuel stations, and obstacles.• Performed simulation and animation using ReactJS, HTML, CSS and Google Map API to visualize routes.	

LEADERSHIP & AWARDS

- **Founding Team Member of StraysCue**, a Non-Profit Organization for animal welfare that secured a grant of \$2,00,000 in technical credits from Xartup fellowship.