YASH VENKATESH BITLA

bitla@usc.edu | 224-857-4693 | [LinkedIn](#) | [GitHub](#)

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

WORK EXPERIENCE

SoFi (Galileo Financial Technologies), USA, *Software Engineer Intern*   **May 2023-Aug 2023**
- Enhanced fraud detection capabilities by implementing a program-level configurable feature for identifying name mismatches in incoming ACH transactions, preventing unauthorized transactions.
- Developed the name mismatch service in shadow mode and processed incoming ACH transactions within 1% of the existing time while collecting valuable data for analysis and insights.

Integrated Media Systems Center Lab, USC, *Graduate Research Assistant*   **May 2022-May 2023**
- Research focused on Object Detection and Counting Challenges in Real World Street Monitoring: Case Study of Homeless Encampments under Dr. Seon Kim. (Accepted at ICIP, 2023)
- 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 tracker for tracking multiple objects for a non-static camera.

Development Monitors LLC, Arlington, USA, *Machine Learning Intern*   **Jun 2021-Dec 2021**
- Trained a Feature Pyramid Network on geospatial satellite imagery to detect building roof types (mud, metal, clay) and improved accuracy by 146%.
- Implemented Machine Learned Regularization and Polygonization of Building Segmentation Masks ([Link](#)) to produce visually pleasing building outlines.
- Created shapefiles with roof detection coordinates and rendered them on web-based community mapping software.

Young Women's Christian Association, India, *Software Engineer Intern*   **Jan 2020-Oct 2020**
- 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%.

TECHNICAL SKILLS

- Programming Languages - Python, Java, C++, HTML, CSS, JavaScript, SQL
- Frameworks & Tools - PyTorch, Docker, Kubernetes, Flask, ReactJS, AngularJS, NodeJS, Rest APIs, Git
- Database and Cloud - MongoDB, MySQL, Hadoop, Firebase, GCP, AWS, PostgreSQL

PROJECTS

Event Finder Application ([Link](#))   **Feb 2023-Mar 2023**
- Developed a web page using AngularJS, NodeJS 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**
- 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.