

Vedica Rao

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EDUCATION

- **Santa Clara University** Santa Clara, CA
Master of Science in Computer Science *Sept 2022 - (exp) June 2024*
 - Coursework: Computer Architecture, Advanced Database Systems, Pattern Recognition & Data Mining, Distributed Systems
- **PES University** Bangalore, India
Bachelor of Technology in Computer Science *Aug 2018 - June 2022*
 - Coursework: Data Structures & Algorithms, Operating Systems, Cloud Computing, Computer Networks, Database Management Systems

TECHNICAL SKILLS

- **Languages:** C, C++, Python, MATLAB, SQL
- **Frameworks/ Tools:** Flask, OpenCV, Git, GoogleTest, JIRA, Qt

EXPERIENCE

- **Zebra Technologies** Bangalore, India
Automation and Testing Intern *Jan 2022 - July 2022*
 - Designed and implemented algorithms to simulate and rigorously test proprietary black box Machine Vision library tools, utilizing OpenCV C++ and MATLAB.
 - Developed comprehensive automation test cases for custom image processing APIs, making use of the GoogleTest framework.
 - Collaborated seamlessly with cross-functional teams in an agile development environment, ensuring efficient and effective project delivery.
- **Autoyos** Bangalore, India
Software Development Intern *May 2021 - Dec 2021*
 - Spearheaded the creation and development of the front-end design model for the innovative desktop application, iDEA (intelligent Dry Eye Analysis).
 - Engineered a robust application, employing PyQt and SQL, to capture patient demographics and clinical inputs.
 - Implemented the application on custom Linux-based devices for accurate Dry Eye Syndrome detection and diagnosis, contributing to improved patient care.

PROJECTS

- **Automating generation of form elements based on user intent | NLP, BERT, Flask** - Developed a classification layer with contextualized BERT embedding for automated generation of form elements based on user intent. Resultant application demonstrated automatic generation of form elements to simplify questionnaire/ survey form building.
- **YACS: Yet Another Centralised Scheduler | Python** - Built a centralised scheduler that distributes workloads across multiple worker machines according to different scheduling algorithms including Round Robin and Least Loaded. Implemented using threads and mutex locks for concurrency control.
- **Relational Database Management System | C++** - Developed a relational database implementation written in C++ featuring a file manager, relation manager, index manager, and query engine

PUBLISHED PAPERS

- "Analyzing the Development of Complex Social Systems of Characters in a Work of Literary Fiction"
IEEE 2022 International Conference Of Emerging Technologies(INCET), July 2022

EXTRA CURRICULAR

- **PES Model UN Society:** Wrote and managed articles by the Society's Editorial "For the Record" (08/2020-11/2020). Assisted in Model UN and debate event management.
- **Gutsy Entrepreneurship 2.0 Winner:** Secured first place in the competition Gutsy Entrepreneurship 2.0 (August 2020) hosted by PES University with 200+ competing teams.