

SUMANTH V RAO

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EDUCATION

UNIVERSITY OF CALIFORNIA SAN DIEGO

June 2023 (Expected)

Master of Science, Computer Science and Engineering (currently pursuing)

- **Current courses** - Algorithm Design & Analysis, Computer Security, Database Management Systems.

PES UNIVERSITY, BANGALORE

July 2020

Bachelor of Technology, Computer Science and Engineering

- GPA : **9.57 / 10.00**, Graduated First Class with Honors [🔗 Transcript](#)
- **Courses** - Data Structures & Algorithms, Operating Systems, Big Data & Cloud Computing, Computer Networks & Security, Objected Oriented Design, Programming Languages, Web Technologies - I & II.

EXPERIENCE

CITRIX | BENGALURU, INDIA

Aug 2020 - Aug 2021

Software Engineer, Citrix Licensing Team

- Architected and implemented a series of License Server features that would improve customer engagement by providing customers access to more information about their license utilization.
- Crafted the automation infrastructure using a robust microservices based architecture housed in Azure Cloud, thereby decreasing automation resource utilization by 50%.
- Participated in CTFs, threat modeling activities, video trainings, and quizzes to achieve the highest level (Black Belt) of Citrix Ninja Certification on Software Security.

ZULIP - OPEN SOURCE TEAM CHAT PROJECT

Jan 2019 - Aug 2020

Google Summer of Code (GSoC) Student & Mentor, Full-stack Open Source Developer

- Contributed to Zulip Server, WebApp and Terminal repositories, spanning multiple features, code refactors and bug-fixes covering Python, Django and JavaScript source code. [🔗 Contributions](#)
- Selected as a GSoC Mentor for two consecutive summers and mentored three students, guiding and reviewing their work as they contributed and engaged with the diverse community of global developers.
- Facilitated improvements in functionality and performance of Zulip Terminal as a GSoC Student for Summer 2019.

DATA ANALYTICS COURSE, PES UNIVERSITY

Aug 2019 - Nov 2019

Undergraduate Teaching Assistant

- Responsible for designing and evaluating programming assignments and quizzes in R and Python, conducting special talks, and holding office hours to interact with students.

PROJECTS

FUTURISTIC SMART HOME AUTOMATION SYSTEM | RESEARCH PROJECT [🔗](#)

Oct 2019 - Dec 2020

Center for Information Security, Forensics and Cyber Resilience (ISFCR), PES University

- Developed an open, scalable architecture which provides an ecosystem for interoperability among competing voice-assistants (like Google Home, Amazon Alexa) with IoT devices.
- Studied the security posture of typical smart home assistants, and devised improvements to security and privacy.

YOGA POSE CLASSIFICATION SYSTEM | PERSONAL PROJECT [🔗](#)

Aug 2019 - Nov 2019

- Developed a deep learning based system for classifying four different yoga poses using Long Short-Term Memory (LSTM) model with an accuracy of 92% using Python, Pandas, Numpy and Keras.
- Formulated a learning system that generates fake yoga poses by latent space interpolation.

INDIAN CRICKET LEAGUE PREDICTION MODEL | PERSONAL PROJECT [🔗](#)

Sep 2018 - Nov 2018

- Estimated the outcomes of all cricket matches during the 2018 season by developing two score-wicket prediction models and using ball-by-ball data from previous years. Tools Used : Apache Spark MLlib, Scala, PySpark.

DATABASE MANAGEMENT SYSTEM | ORGANIZATION PROJECT [🔗](#)

May 2018

- Built a practical DBMS for an orphanage *AnathaShishu Nivasa*, Bangalore for the administration to manage donation details with an easy to use frontend for data entry and query. PostgreSQL, PHP, JS, HTML

SKILLS

- **Technologies** Python, C, C++, JavaScript, SQL (PostgreSQL), Django, Web Services, REST APIs.
- **Tools** Git, Docker, Vagrant, Azure Cloud, Jenkins, Wireshark.
- **Scholarships** JN Tata Endowment Scholar, 2021 - 2022 | Recipient of the Scholarship towards my graduate studies in Computer Science at UC San Diego.
- **Certifications** Certified SAFe® 5 Practitioner, Azure Fundamentals, Parallel Programming in OpenMP.
- **Co-Curricular** VP External, 2021-2022 | Jacobs Graduate Student Council, UC San Diego.
JUMP Mentor, 2021-2022 | Jacobs Undergraduate Mentoring Program, UC San Diego.
- **Awards** Winners, Pravega IBM Hackathon, Jan 2019 | Indian Institute of Science, Bangalore - Built a probabilistic model to determine the authenticity of [News Articles](#) [🔗](#)
- **Sports & Hobbies** Badminton, Piano, Singing (Indian Classical Music), Hiking & Trekking.