SHREY KISHOR DEDHIA

Education

Stony Brook University

May 2024 (Expected)

Master of Science in Computer Science

New York, United States

Dwarkadas J. Sanghvi College of Engineering (University of Mumbai)

June 2022

Bachelor of Engineering in Computer Engineering (CGPA - 9.67/10)

Mumbai, India

Technical Skills

Languages: JavaScript, Python, C++, C, SQL, Bash, HTML, CSS

Software & Tools: ReactJS, Django, Django Rest Framework, MySQL, PostgreSQL, Git, Vue.js, D3.js, Pandas, NumPy, scikit-learn, TensorFlow, MongoDB, BeautifulSoup4, Splunk, Wireshark, Heroku, Docker, LaTeX

Work Experience

Stony Brook University - Graduate Teaching Assistant

August 2022 - Present

ISE 305: Database Design and Practice - Prof. Praveen Tripathi

New York, United States

- Resolving students' queries on relational data modeling, database administration, SQL, and application development.
- Proctoring 120 students, grading tests/assignments, and conducting office hours.

JPMorgan Chase & Co.

June 2021 – August 2021

Software Engineer Intern - Corporate & Investment Banking (CIB) Team

Mumbai, India

- Automated a 12 year-old procedure of detecting unstructured and dynamic errors in real-time machine data logs across 30+ servers during CI/CD process. Used Splunk, PuTTY and SSH to access remote Unix servers.
- Constructed an interface on private cloud to switch data centers by user-traffic, reducing operation time from 5 hours to 30 minutes.

ReWiser Educational Services Pvt. Ltd.

May 2020 - July 2020

Software Developer Intern

Mumbai, India

- Designed and developed a human resource management system, and created the software documentation.
- Optimized the database structure, utilized CronJob for less latency and lowered computational overheads by 45%.

Projects

Vision Acolyte | GANs, TensorFlow, GloVe, spaCy, Python

July 2021 - May 2022

- Devised methodology on GANs and T5 model to build text-to-video framework for children with cognitive impairments.
- Performed extensive literature review and achieved R-precision of 3.31, surpassing 1.51 by previous StoryGAN model.
- Won 3rd position in Prakalp 2022, SFIT Mumbai (inter-college project competition).

Quicure | Node.js, Express.js, bcrypt, MySQL, React

July 2020 - November 2020

- Developed a full-stack software focused on expediting consultancy and booking at hospitals/clinics.
- Modeled the database schema, handled concurrency control, triggers, locks and JWT authentication & authorization.

Food For Good | Django, React, SQLite

February 2020 - May 2020

- Created an ingredient-ordering e-commerce website intended to alleviate food availability problems during COVID-19.
- Utilized structured SQL data, built cart functionality, intuitive user interfaces, and integrated APIs.

Research & Publications

- A novel dual model approach for categorization of unbalanced skin lesion image classes, 5th International Conference on Computational Vision and Bio-Inspired Computing 2021 (Springer). (DOI: 10.1007/978-981-16-9573-5_45)
- Domain adaptation and weight initialization of neural networks for diagnosing interstitial lung diseases, International Journal of Imaging Systems and Technology (Wiley). (DOI: 10.1002/ima.22716)
- Color Image Encryption Architecture Based on a Novel Confusion Approach and Multi-Chaotic Mapping, Journal of Information Security and Applications, Impact Factor - 4.96 (Elsevier). (Accepted with minor revision)

Leadership

DJ Unicode Senior Mentor

August 2019 - July 2022

Mumbai, India

- Mentored 9 sophomores over two open-source projects: 'Transcripts Portal' and 'Events-Management System'.
- Supervised 80+ mentees and prepared exhaustive technical assignments during 10-week 'sophomore learning period'.