

Jay Gala

jaygala24@gmail.com | github.com/jaygala24 | jaygala24.github.io | linkedin.com/jaygala24

EDUCATION

Dwarkadas J. Sanghvi College of Engineering, University of Mumbai

B.E. Computer Engineering

2017 - 2021 (expected)

- Courses: Applied Math, Algorithms, Databases, Machine Learning, Artificial Intelligence, Natural Language Processing
- CGPA: 9.82/10 (9.95/10 in Core CSE Courses)

EXPERIENCE

Tata Consultancy Services — Machine Learning Project Intern

Dec 2019 - Feb 2020

- Developed NLP language models for customer analysis to prevent customer churn
- Prepared custom dataset, created surveys to handle open-ended and closed-ended questions
- Extracted feedback responses from handwritten forms using OCR
- Technologies: Python, Keras, NLTK, Gensim, OpenCV, NumPy, Pandas

Ucadd EdTech — Web Developer

Dec 2018 - Aug 2019

- Built a platform for the organization's instructors to build courses
- Introduced data analytics to generate useful insights regarding the courses for the instructors
- Technologies: ReactJs, NodeJs, ExpressJs, MongoDB

Sensum Fintech — Frontend Developer

Jan 2019 - Feb 2019

- Constructed visualization graphs using plotly to show the trends in the finance trading markets
- Integrated backend APIs for stock recommendations and improved user experience by optimizing the builds
- Technologies: ReactJs, Material UI, Plotly

Unicode — Web Developer & Student Mentor

Aug 2018 - Present

- Mentored a team of sophomores on projects such as Inventory Management, Masters and Placement Portals
- Conducted workshop on web development and open-source development for over 100 students in the college
- Technologies: ReactJs, NodeJs, MongoDB, Django, MySQL

PROJECTS

Ocubot - Image-based Dialog for Visually Impaired — Guide: Prof. Pratik Kanani

Jul 2020 - Mar 2021

- Incorporate knowledge from perception and language to have more natural conversations
- Reduced modality biases by improving visual context with the use of dense captions and attention
- Technologies: Python, PyTorch, NLTK, SpaCy, Jupyter

Neural Style Transfer [\[View Blog\]](#)

Jul 2020

- Generated artistic works by blending the style of one image with the content of another image
- Implementation of A Neural Algorithm of Artistic Style by [Leon A. Gatys et al.](#) in PyTorch
- Technologies: Python, PyTorch, Jupyter

Image Captioning using Attention — Guide: Prof. Pratik Kanani [\[View Notebook\]](#)

Feb 2020 - Apr 2020

- Generated descriptive captions from an image along with attention map
- Implementation of Show, Attend and Tell paper by [Kelvin Xu et al.](#) in PyTorch
- Technologies: Python, PyTorch, NLTK, Jupyter

C Programming Exam Portal [\[Project Demo\]](#)

Jan 2020 - Feb 2020

- A paperless solution for conducting C programming exam for over 500 students at D. J. Sanghvi
- Reduced teacher workload by automating report generation
- Technologies: ReactJs, Material UI, NodeJs, ExpressJs, MongoDB

RESEARCH & PUBLICATIONS

Improving Image-based Dialog by Reducing Modality Biases — Guide: Prof. Pratik Kanani

Apr 2020

Technical Paper in 5th International Conference on Advances in Computing and Data Sciences, Springer, Presented

Pothole Detection and Dimension Estimation — Guide: Prof. Ruhina Karani

Nov 2020

Technical Paper in 35th International Conference on Image and Vision Computing New Zealand, IEEE, Published

IoT and ML based Smart System for Efficient Garbage Monitoring — Guide: Prof. Meera Narvekar

Aug 2020

Technical Paper in 3rd International Conference on Smart Systems and Inventive Technology, IEEE, Published

Virtual Farmer — Guide: Prof. Ramchandra Mangrulkar, Prof. Pankaj Sonawane

Jul 2020

Technical Paper in 11th International Conference On Computing, Communication And Networking Technologies, IEEE, Published

SKILLS

Programming Languages: Python, C, Java, JavaScript, SQL, HTML5

Databases: MySQL, SQLite, PostgreSQL, MongoDB

Libraries and frameworks: PyTorch, Keras, Scikit-learn, NumPy, Pandas, OpenCV, Gensim, SpaCy, NLTK, Flask, ReactJs, NodeJs

Other tools: Git, Jupyter, Docker, Raspberry Pi

HONORS AND AWARDS

- Placed **1st** in ACM LOC Hackathon (2020)
- Placed **3rd** in CodeShashtra (State-wide hackathon) (2020)

HOBBIES

Writing Blogs, UI/UX Design, Student Leadership