Ketaki Gokhale

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EDUCATION

University of Illinois Urbana-Champaign (Incoming) Jan 2024 – May 2025
Master of Computer Science *Champaign, IL*

Pune Institute of Computer Technology August 2017 – May 2021
Bachelor of Engineering - Computer Engineering, **GPA: 8.71/10** *Pune, India*
- Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Database Management Systems, Web Technology, Machine Learning

TECHNICAL SKILLS

Programming Languages: Python, C++, DataWeave, HTML/CSS, JavaScript, RAML
Frameworks and Tools: Docker, Git, Jenkins, Postman, Mule ESB, MUnit
Libraries: NumPy, Pandas, React.js, Keras, TensorFlow, PyTorch
Databases: MySQL, Firebase, MongoDB

WORK EXPERIENCE

Research Assistant August 2023 – Present
Pune Institute of Computer Technology *Pune, India*
- Investigating methods for continuous sign language recognition using deep learning under Prof. R. Sreemathy.
- Assisting in developing a comprehensive dataset for continuous recognition of Indian Sign Language.

Backend Developer August 2022 – February 2023
Private AI *Toronto, Canada (Remote)*
- Implemented pre-commit hooks in Python to detect Personally Identifiable Information (PII).
- Experimented with model ensembling and improved the average recall of the PII redaction model by 9%.
- Investigated and resolved high-priority bugs and system failures.

Software Engineer February 2021 – July 2022
Apisero *Pune, India*
- Re-designed an API using MuleSoft for a major healthcare client, making it simplified and multi-functional.
- Implemented FTP and Mail connectors to interface with respective target systems in multiple Mule projects.
- Boosted the performance of an API from 0.2 requests per second to 10 requests per second.
- Maintained Jenkins pipelines to facilitate reusability and automation in different target environments.
- Worked on modifying and implementing various crucial DataWeave transformations.

Machine Learning Intern December 2019 – February 2020
Makers Lab, Tech Mahindra *Pune, India*
- Developed a solution to perform image captioning using TensorFlow as an aid to the visually impaired.
- Implemented an encoder-decoder architecture and utilized InceptionV3 model as the encoder by transfer learning.
- Achieved a BLEU-1 score of 0.66 on the Flickr30k dataset.

PROJECTS

3D Reconstruction from 2D Images | *PyTorch, AngularJS, Node.js* August 2020 – May 2021
- Developed a novel approach to generate 3D models from single or multiple 2D images on 13 object categories.
- Implemented a clear and responsive user interface and integrated it with the Deep Learning model.
- Performed unit testing and performance testing using Jasmine framework and Lighthouse respectively.
- Achieved state-of-the-art results on the ShapeNet dataset by using a CNN upscaler on RGB-D images.

Hospital Bed Availability Portal for Covid-19 | *Node.js, React.js, MySQL* June 2020
- Developed a website that displays and dynamically updates the availability of beds in nearby hospitals.
- Implemented database schemas in MySQL and REST APIs to fetch relevant data.

CERTIFICATES

Microsoft Learn AI Skills Challenge | Neural Networks and Deep Learning (DeepLearning.AI) | Introduction to Data Science in Python (University of Michigan) | Build Basic Generative Adversarial Networks (DeepLearning.AI)