Mudit Chaudhary

Graduate Student looking for Summer 2022 Internship

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Education

University of Massachusetts, Amherst	MA, USA Sep 2021 - May 2023

M.S. in Computer Science | Concentration: Data Science

Relevant Courses: Systems for Data Science, Neural Networks, Independent Study on Question Answering Systems

The Chinese University of Hong Kong	Hong Kong Sep 2016 - May 2020

B.Sc. in Computer Science | Concentration: Intelligent Science

Minor: Data Analytics and Informatics

Relevant Courses: Software Engineering, Data Structures, Algorithms, Mobile App Development, Database Systems, Operating Systems, Principles of Programming Languages, Machine Learning

Scholarships and Awards: Dean's List, College Head's List, College Academic Prizes, Honors at Entrance, Faculty of Engineering Admission Scholarship, University Full-tuition Admission Scholarship

Work Experience

The Chinese University of Hong Kong	Hong Kong Aug 2020 - Aug 2021

Full-time Research Assistant (Supervisor: Professor Helen Meng)

- Researched on Dialog Systems and Cross-lingual Hyperbolic Word Embeddings in NLP, and submitted research papers to major conferences
- Participated in the 9th Dialog System Technology Challenge (DSTC9) and qualified as top finalists with a workshop paper accepted at DSTC9 workshop at AAAI-2021
- Assisted in the development and deployment of a knowledge-grounded dialog system that extracts information from unstructured knowledge for queries outside the structured database
- Assisted in the development of AI teaching curriculum and tools for 55 high schools in Hong Kong
- Developed and deployed Aspect-Based Sentiment Analysis and Voice Conversion deep learning models as Web APIs and scaled to production using Docker
- Conducted API load testing using Apache JMeter
- Developed dashboard for monitoring and managing the deployed Web APIs
- Maintained and configured GPU servers for model development, training, and deployment

Logistics and Supply Chain MultiTech (LSCM) R&D Centre	Hong Kong Jun 2019 - Aug 2019

Summer Intern (Supervisor: Dr. Dorbin Ng)

- Researched, developed, and trained Transformer based neural machine translation model and deep learning sequence models for business arbitration domain
- Generated computational resource estimations for the models and performed feasibility analysis
- Designed and developed a deep learning model system to learn non-verbal features in conversational setting from audio and video media for chatbot augmentation

Major Projects

- **Unstructured Knowledge Access in Task-oriented Dialog Modeling using Language Inference, Knowledge Retrieval and Knowledge-Integrative Response Generation:** A task-oriented dialog system with external unstructured knowledge access — [arXiv:2101.06066] [Github]
- **Improved RepPoints Object Detection Model with novel KQR Attention:** Used training balancing methodologies and developed a novel transformer-based attention mechanism for RepPoints — [Github]
- **Small Sample Learning:** Food Classification from a small training sample. Project for Huawei AI Cloud Developer Challenge 2019 (Top 10 Finalists) — [Github]
- **UTrack:** An Android app for tracking graduate school applications using Kotlin and Firebase — [Github]
- **NoQueue:** A food ordering web application using Django with user management — [Github]
- **Employee Hiring Portal:** Developed an employee hiring portal for job posting and job application using Java and SQL — [Github]

Skills and Certifications

Certification: Microsoft Azure AI Fundamentals AI-900 Credential ID: oQCV-uSoV

Technical Skills: Python, Java, Kotlin, C, C++, PyTorch, Keras, Tensorflow, Linux, Docker, Flask, Django, REST API, Android app development, Git, Apache JMeter, MongoDB, MySQL, Natural Language Processing, Computer Vision