

Mudit Chaudhary

Graduate Student looking for Summer 2022 Internship

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Education

University of Massachusetts, Amherst

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

Relevant Courses: Systems for Data Science, Neural Networks

MA, USA

Sep 2021 - May 2023

The Chinese University of Hong Kong

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

Minor: Data Analytics and Informatics

Relevant Courses: Machine Learning, Artificial Intelligence, Linear Algebra and Vector Calculus, Algorithms, Database Systems, Operating Systems, Software Engineering, Data Science

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

Hong Kong

Sep 2016 - May 2020

Work and Research Experience

University of Massachusetts, Amherst

Graduate Student Researcher (Supervisors: Professor Andrew McCallum and Ms. June Thai)

- Performing credit-bearing research at the Information Extraction and Synthesis Laboratory (IESL)
- Working on 'Case-based Reasoning for Question Answering (QA) over Knowledge Base and Text'
- Developing an explainable QA system which can generalize to ad-hoc reasoning patterns from similar observed examples while being robust to changes in the knowledge base

MA, USA

Sep 2021 - Present

The Chinese University of Hong Kong

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 AACL-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
- Researched and developed cross-lingual word representations in hyperbolic space with potential uses in downstream NLP tasks such as translation and cross-lingual lexical entailment
- Developed and deployed Aspect-Based Sentiment Analysis and Voice Conversion deep learning models to production as Web APIs and scaled to production using Docker
- Maintained and configured GPU servers for model development, training, and deployment

Hong Kong

Aug 2020 - Aug 2021

Logistics and Supply Chain MultiTech (LSCM) R&D Centre

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

Hong Kong

Jun 2019 - Aug 2019

Major Projects and Publications

- Unstructured Knowledge Access in Task-oriented Dialog Modeling using Language Inference, Knowledge Retrieval and Knowledge-Integrative Response Generation:** Workshop paper accepted for AACL-21 Conference's Dialog Systems Technology Challenge 9 (DSTC9) Workshop [\[arXiv:2101.06066\]](https://arxiv.org/abs/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) [\[Github\]](#)

Skills and Certifications

Certifications: 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, mmdetection, Apache JMeter, MongoDB, MySQL, Natural Language Processing, Computer Vision, Object Oriented Programming