Shilpa Suresh

✉ ssuresh@umass.edu | 🔗 shilpa-suresh | 🐦 @shilpa15397 | +1 (413) 512 - 3604

EDUCATION

University of Massachusetts – Amherst, U.S.A.   *2020 – 2022*

MS in Computer Science

Relevant Coursework: Neural Networks, Artificial Intelligence

Singapore Management University, Singapore   *2015 – 2019*

B.Sc. Information Systems - 2nd Major: Analytics (Advanced Technology)

WORK EXPERIENCE

University of Massachusetts - Amherst   USA, **Feb '21 – Current**

Graduate Student Researcher - Faculty Mentor: *Prof. Andrew McCallum*

- **Multilingual Multi-task Learning using DIORA:** Research Study to improve accuracy of the unsupervised parsing DIORA model by cross-training on multiple languages using multi-task learning. (Feb '21 – Jul '21)
- **Continual Learning for NLP:** Research study aimed at tackling the problem of catastrophic forgetting, especially applied to self-supervised, meta-learning-based models in few-shot classification tasks. (Sep '21 –)

Visa Inc.

Systems Analyst   Singapore, **Jul '19 – Aug '20**
Systems Analyst Intern   **Jun '18 – Aug '18**

- Worked on **Topic Generation** for domain-specific interview scripts
- Performed **Data-driven Program Management** and **Business Process Improvement** on a key company-wide Cloud migration project with stakeholders that included upper management in the Operations and Infrastructure department as well as technical teams spanning the department

KeyReply   Singapore, **Dec '17 – Jun '18**

Natural Language Processing Research Intern   **(Sep '18 – Jan '19, Consultant)**

- Designed a Task-driven, Domain Adaptable Model to **Generate Questions from Text**
- Worked on a **Machine Translation Project** for South-East Asian Languages in consultation with CTO Max Xu

KEY TECHNICAL SKILLS

Primary Languages: Java, Python, SQL | **Libraries:** PyTorch, Tensorflow | **Tools:** Tableau, PowerBI, Grafana

RECENT PROJECTS

Incorporating A-Priori Knowledge for Personality-driven Image Captioning

Prof. Erik Learned-Miller, UMass-Amherst, USA

Developed a method to generate Personality-driven captions for images using less training data.

Detecting Political Bias in News Publications

Prof. Swapna Gottipati, SMU, Singapore

Built a model to detect bias towards a particular US Presidential Candidate (Clinton or Trump) in the 2016 Presidential election using stance detection and sentiment analysis run on Twitter data and Newspaper headlines. ***Key Technologies:*** NLTK, SpaCy, Keras

Final Year Project (B.Sc.) – Computer Vision-based Shopping Experience Platform

Prof. Benjamin Gan, SMU, Singapore

Built an e-commerce platform in a team of 5 that allows users to virtually "try on" makeup using facial recognition and computer vision techniques. ***Key Technologies:*** OpenCV, Unity

PUBLICATIONS

- *Improved Latent Tree Induction with Distant Supervision via Span Constraints – **EMNLP 2021***
- *Can a chatbot read your mind?: Domain and Answer Adaptive Task-oriented Question Generation through Meta-Learning –* **WiML Workshop at NeurIPS 2018**

RESEARCH & PROFESSIONAL ACTIVITIES

- Invited **Program Committee Member & Reviewer**, NLP-OSS Workshop at **EMNLP 2020**
- **Reviewer** for Women in Machine Learning (WiML) Workshop at **NeurIPS 2018**
- **Talk:** Encrypted and Decentralized Artificial Intelligence - *TensorFlow & Deep Learning Group at Google APAC*