

KEY SKILLS & INTERESTS

Machine Learning

PyTorch

Tensorflow

Deep Learning

Graph Neural Networks

Scalable Models

Sparse Operations

Distributed Training

Programming Languages

Python

C++/C

Java

R

JavaScript/Node.js

Software Development

Unix/Linux

Docker

MySQL

MongoDB

Elastic Search

Cloud Development

Soft Skills

Teaching

Communicative

Friendly

Collaborative

Personable

PhD Student at USC working with Greg Ver Steeg and Aram Galstyan on scalable graph representation learning with interests in self-supervised techniques, inherently scalable models, and extending graph neural networks to knowledge graphs.

WORK EXPERIENCE

Applied Science Intern, 05/2022 to 08/2022

Amazon Alexa, Seattle, WA

- Start to finish, created and completed project on knowledge enhancement for multi-domain and zero-shot recommendation systems. Continuing work to develop a comparable public dataset to promote further research. To be submitted to PAKDD 2023.

Software Engineer, 09/2018 to 08/2019

Ultimate Software, San Francisco, CA

- Worked to support their People First mission by delivering survey-based insights utilizing analytics and natural language processing
- Backend development on Python server to support move to using public cloud. Worked to align server with the “twelve-factor app” principles.

Research Intern, 01/2018 to 09/2018

Center for Vision, Cognition, Learning, and Autonomy, Los Angeles, CA

- Led development of rich 3D human pose dataset using animation and machine learning techniques; Dataset includes 2,446 actions (~2 million 3D frames) covering 89 action classes.

Software Intern, 07/2016 to 09/2016

LearnBIG, Bellevue, WA

Research Intern – Statistical Analysis and Modeling, 07/2013 to 09/2015

Fred Hutchinson Cancer Research Center, Seattle, WA

PUBLICATIONS

“Biased User History Synthesis for Personalized Long-Tail Item Recommendation” *In Review*

“StATIK: Structure and Text for Inductive Knowledge Graph Completion” *NAACL-HLT 2022*

“Graph Traversal with Tensor Functionals: A Meta-Algorithm for Scalable Learning” *ICLR 2021*

“Benchmarking Covid-19 Mortality in the United States” *BioRxiv 2020*

“The Effect of Treatment Advances on the Mortality Results of Breast Cancer Screening Trials: A Microsimulation Model”, *Annals of Internal Medicine 2016*

“Single-fraction Radiation Therapy in Patients with Metastatic Merkel Cell Carcinoma”, *Cancer Medicine 2015*

RECOGNITION & COMMUNITY INVOLVEMENT

- *KDDCup 2021 WikiKG90M Team Lead*
- *Teaching Assistantship – 662: Advanced Natural Language Processing, 2021/2022*
- *Teaching Assistantship – 360: Introduction to Artificial Intelligence, 2022*
- *Teaching Assistantship – 104: Data Structures and Object Oriented Design, 2020*
- *Policy Committee for WaSTRONG, developing climate change legislation, 2021*
- *Upsilon Pi Epsilon Honor Society, CS Tutor, 2017*

EDUCATION

University of Southern California, Los Angeles, CA

Ph.D. in Computer Science (2019-Present)

GPA: 4.00

University of California, Los Angeles, CA

BS in Computer Science 2018, Graduated Cum Laude

GPA: 3.78, Dean’s List (Fall 2014; Winter 2015; Winter and Spring, 2016; Winter 2018)

Humanities Studies, University of Cape Town, Cape Town, South Africa, Spring-Summer 2017