KSHITEESH HEGDE

 ✓ San Jose, CA
 ← +1 (612) 227-5517
 ☑ kshiteesh.hegde@gmail.com
 In hegdekshiteesh
 ★ kshiteesh.hegde

PROFESSIONAL SUMMARY

ML Scientist with 5+ years of experience in solving impactful and challenging research and engineering problems. I thrive in a position that involves researching and applying new ML techniques to achieve strategic business visions.

WORK EXPERIENCE

Machine Learning Scientist, Western Digital, San Jose, CA

Jul 2018 - Present

- Developed production-quality machine learning models that proactively identify hard disk drive (HDD) failures, resulting
 in a 10% reduction in cost
- Designed deep learning object detection and segmentation models to detect anomalies in scanning electron microscope (SEM) images, lowering manual workload by 15%
- Translated requirements from cross-disciplinary teams and subject-matter experts (SMEs) into effective MLOps solutions like CI/CD resulting in a 10% increase in human feedback efficiency
- Instituted team best practices for data construction, curation, and advanced feature engineering that led to a 2X streamlining of data modeling
- Generated timely presentations and effectively communicated results to technical, non-technical, and executive leadership teams

Data Science Intern, Pacific Northwest National Laboratory (PNNL), Richland, WA

Summer 2017

Visiting Researcher, US Army Research Laboratory (ARL), Adelphi, MD

Summer 2015

SELECTED RESEARCH PUBLICATIONS

Recommendations for Streaming Data

(Won SIGIR travel award to present at the conference) CIKM

- Real-time recommendation system that uses negligible on-core storage
- 2X better than state-of-the-art; self-improving and works in online setting

Deep Network Signatures for Subgraph Classification

(Virtual presentation) KDD

- Highly scalable graph classification system that works with as few as 8 nodes
- Application: Early detection of adversarial networks and network transformations

Node Classification in Topologically Heterogenous Networks

(In-person presentation) MILCOM

- Detection of adversarial actors in a social network using node classification
- 4X better than random classification in networks with over 1 million nodes

The Intrinsic Scale of Networks is Small

(Invited to present) ASONAM

- Intrinsic scale of real networks is empirically shown to be 7 to 20 nodes
- Structure and robustness of networks is quantified thus guiding downstream analysis

EDUCATION

PhD in Computer Science, Rensselaer Polytechnic Institute, Troy, NY

Summer 2018

MS in Computer Science, University of Minnesota - Twin Cities, Minneapolis, MN

Spring 2013

BEng in Electronics & Communication, Visvesvaraya Technological University, Mysuru, India

Fall 2011

SERVICE

Technical Program Committee Member: NeurIPS; ICLR (Area Chair); KDD; UAI; IJCNN; IEEE TSP, ICIP

SKILLS

Python

pandas, scikit-learn, numpy, Keras, TensorFlow, PyTorch, Docker, Flask

AI/ML Deep Learning, Segmentation, Classification, Graphs, Anomaly Detection, NLP, LLMs