

Neehar Peri

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732.325.4663

EDUCATION

B.S. in Computer Engineering, University of Maryland - College Park

QUEST Honors Program

GPA: 3.92

Expected May 2021

PUBLICATIONS

- [Deep \$k\$ -NN Defense against Clean-label Data Poisoning Attacks](#) ICMLW 2020
*N Peri**, *N Gupta**, *WR Huang**, *L Fowl*, *C Zhu*, *S Feizi*, *T Goldstein*, *JP Dickerson*
- [The Devil is In the Details: Self-Supervised Attention for Vehicle Re-ID](#) ECCV 2020
*P Khorramshahi**, *N Peri**, *JC Chen*, *R Chellappa*
- [Towards Real-Time Systems for Vehicle Re-ID, Multi-Camera Tracking, and Anomaly Detection](#) CVPRW 2020[†]
*N Peri**, *P Khorramshahi**, *SS Rambhatla**, *V Shenoy*, *S Rawat*, *JC Chen*, *R Chellappa*
- [Attention Driven Vehicle Re-ID and Unsupervised Anomaly Detection for Traffic Understanding](#) CVPRW 2019[†]
P Khorramshahi, *N Peri*, *A Kumar*, *A Shah*, *R Chellappa*
- [A Dual Path Model with Adaptive Attention for Vehicle Re-ID](#) ICCV 2019[†]
P Khorramshahi, *A Kumar*, *N Peri*, *SS Rambhatla*, *JC Chen*, *R Chellappa*

*Equal Contribution

[†]Selected for Oral Presentation

WORK EXPERIENCE

Mukh Technologies, College Park, MD, *Research Intern*

Aug 2020 – Present

- Leading research on improving facial recognition performance across domain shift with large-scale data
- Building facial recognition pipelines for multi-spectral data streams

Carnegie Mellon University, Pittsburgh, PA, *Robotics Institute Research Intern*

Apr 2020 – Nov 2020

- Leading research on open-world detection and tracking of 3D objects to improve safety in self-driving vehicle applications

University of Maryland, College Park, MD, *UMIACS Research Intern*

May 2018 – Jun 2020

- Conducted research in traffic analytics for unsupervised anomaly detection and discriminative representation learning for vehicle re-identification
- Led research in defending against clean-label adversarial attacks

Bank of America, Charlotte, NC, *Conversational Commerce Technology Intern*

Jun 2019 – Aug 2019

- Developed deep learning pipeline to validate quality of utterance-intent pairs in chatbot conversations using PyTorch, AllenNLP, and NLTK
- Delivered novel insights to improve customer satisfaction from production data and reduce call center call volume
- Deployed RESTful Active Learning API to introduce targeted learning feedback loop and improve intent classification model performance

TEACHING EXPERIENCE

University of Maryland, ECE Department, *Introduction to Digital Logic*

Jan 2019 – May 2019

- Led recitation for a discussion section of 15 students
- Received highest marks on metrics of preparedness, respect for students, and overall teaching effectiveness from all students

PROJECTS

Northrop Grumman Corporation, Elkton, MD, *Process Improvement Consultant*

Jan 2020 – May 2020

- Worked with a team to identify bottlenecks in information flow through 23 stakeholder interviews
- Created wire-frames as proof-of-concept to model multi-media knowledge management system
- Projected savings of \$615,000 over 5 years through improvements in productivity, proactivity, and root cause analysis

Cherehani Africa, College Park, MD, *Process Improvement Consultant*

Mar 2019 – May 2019

- Worked with team to consult for micro-finance startup aimed at empowering female entrepreneurs in Kenya
- Built mathematical model to estimate the long-term relationship between loan default rate and projected revenue
- Outlined plan for mentorship program to increase customer financial literacy, retention and engagement

Programming Languages: Python, Ruby, Java, MATLAB, C/C++, C#, OCaml

Computer Hardware Tools: MultiSim, PSpice, Verilog, AutoCAD

Software Frameworks: PyTorch, OpenCV, AllenNLP, NLTK, Flask

Last Updated July 3, 2020