Osman Cihan Kilinc

kilinco.github.io

EDUCATION

- University of California San Diego
 M.S. in Electrical Engineering (Machine Learning and Data Science)
 Istanbul Technical University
- B.S. in Computer Engineering

EXPERIENCE

ASML

 $Software \ Engineer$

- Responsible for developing various software components of the EUV light source.
- $\circ~$ Responsible for supporting the CI/CD tools and practices.
- $\circ~$ Set up OPC UA communication infra structure to enable end-to-end testing of the PLC and software.
- Organized and lead Agile/Scrum events, monitored schedule, presented reports on progress and communicated with stakeholders.

UCSD Adaptive Computing and Embedded Systems (ACES) Lab. San Diego, CA, USA

Research Assistant

- Developed a novel fully-decentralized machine learning method that enables peer-to-peer training.
- $\circ~$ Implemented and tested intellectual property protection methods for deep learning models.

Softtech

- Software Engineer
 - Designed and developed the front-end of a web application where doctors can monitor their patients' health and cardiovascular data in real-time.
 - $\circ~$ Tested front-end code in multiple browsers to ensure cross-browser compatibility and quality control.

Baykar

- Software Engineer
 - $\circ~$ Created an automated testing platform for ECG analysis algorithms using C++ and co-authored the documentation of the wearable heart monitor.
 - Decreased CPU-based computation for the display of real-time high frequency multi-channel signals 20-fold by developing an OpenGL-based 2-D plotting library.

PROGRAMMING SKILLS

- Languages: Python, C++, C, Bash, Matlab
- Frameworks & Tools: PyTorch, Tensorflow, GoogleTest, Jenkins, Git
- Proficient: TypeScript, JavaScript, React, Prisma, GraphQL, PostgreSQL

PUBLICATIONS

- Lalitha, A., Kilinc, O., Wang, X., Javidi, T. & Koushanfar, F. (2019). Decentralized Bayesian Learning over Graphs. arXiv preprint arXiv:1905.10466
- Lalitha, A., Kilinc, O., C., Javidi, T. & Koushanfar, F. (2019). Peer-to-Peer Federated Learning on Graphs. arXiv preprint arXiv:1901.11173
- Chen, H., Rouhani, B. D., Fan, X., Kilinc, O. C., & Koushanfar, F. (2018). Performance Comparison of Contemporary DNN Watermarking Techniques. arXiv preprint arXiv:1811.03713.

Selected Projects

- Vegetation Classification using Hyperspectral Images: Optimized and accelerated a convolutional neural network for vegetation classification on hyperspectral satellite images by 100-fold decrease in model size, whilst maintaining accuracy.
- Social Effects on Finance: Visualized the correlation between stock prices and the public sentiment on Twitter via public sentiment analysis.

Sep 2011 – Feb 2016

San Diego, CA, USA

Sep 2017 - Jun 2019

Istanbul, Turkey

San Diego, CA, USA Sep 2019 – Present

Istanbul, Turkey

Aug 2018 - Jun 2019

Mar 2017 – Aug 2017

Istanbul, Turkey

Apr 2016 - Feb 2017