

## EDUCATION

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- **University of California San Diego** San Diego, CA, USA  
*M.S. in Electrical Engineering (Machine Learning and Data Science)* Sep 2017 – Jun 2019
- **Istanbul Technical University** Istanbul, Turkey  
*B.S. in Computer Engineering* Sep 2011 – Feb 2016

## EXPERIENCE

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- **ASML** San Diego, CA, USA  
*Software Engineer* Sep 2019 – Present
  - Responsible for developing various software components of the EUV light source.
  - Responsible for supporting the CI/CD tools and practices.
  - Set up OPC UA communication infrastructure 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* Aug 2018 – Jun 2019
  - Developed a novel fully-decentralized machine learning method that enables peer-to-peer training.
  - Implemented and tested intellectual property protection methods for deep learning models.
- **Softtech** Istanbul, Turkey  
*Software Engineer* Mar 2017 – Aug 2017
  - Designed and developed the front-end of a web application where doctors can monitor their patients' health and cardiovascular data in real-time.
  - Tested front-end code in multiple browsers to ensure cross-browser compatibility and quality control.
- **Baykar** Istanbul, Turkey  
*Software Engineer* Apr 2016 – Feb 2017
  - 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

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

## PUBLICATIONS

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- 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

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- **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.