Kemal Eren, PhD

Expertise

Machine Learning, Causal Modeling, Bioinformatics, Scientific Programming

Education

2013–2017 **PhD, Bioinformatics and Systems Biology**, *University of California, San Diego*, La Jolla, CA.

2009–2012 **MS, Computer Science and Engineering**, *The Ohio State University*, Columbus, OH.

2004–2009 **BS, Biology**, *University of Michigan*, Ann Arbor, MI.
Minors: Mathematics and Computer Science.

Experience

2018–2021 **Deep Learning Engineer**, ***UPMC***, Pittsburgh, PA.
- Deep learning and causal models for predicting medical outcomes.

2017–2018 **Senior Machine Learning Research Engineer**, ***Qeexo***, Pittsburgh, PA.
- Machine learning-based solutions for mobile devices and embedded platforms.
- Developed a research project to commercialization.

2013–2017 **Doctoral Candidate**, ***UCSD Bioinformatics and Systems Biology***, San Diego, CA.
Advisers: Joel Wertheim, Sergei L Kosakovsky Pond
- Statistical and computational models for viral sequence analysis.

Summer 2013 **Software Engineer**, ***scikit-learn***.
Mentors: Vlad Nicolae, Gaël Varoquaux.
- Funded by the Google Summer of Code.
- Implemented high-performance biclustering algorithms: Spectral Coclustering and Spectral Biclustering.
- Implemented biclustering scoring metrics.

2012–2013 **Software Engineer**, ***Heidelberg Collaboratory for Image Processing***, Heidelberg, Germany.
Supervisor: Fred Hamprecht.
- Image processing algorithms and software.
- Developed object classification for the ilastik interactive learning and segmentation toolkit.

2009–2012 **Graduate Research Assistant**, ***OSU HPC Laboratory***, Columbus, OH.
Adviser: Ümit V. Çatalyürek.
- Developed BiBench, a framework for validation of biclustering algorithms on simulated and real microarray datasets.
- Studied and updated the Correlated Patterns Biclustering (CPB) algorithm.
- Developed algorithms for sequence mapping using the Burrows Wheeler Transform on graphical processing units.

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