Safa Cicek

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EDUCATION

UCLA

PHD IN ELECTRICAL AND COMPUTER ENGINEERING

2015-2020 | Los Angeles, California In UCLA Vision Lab under the supervision of Professor Stefano Soatto.

Thesis: Visual Learning with Weak Supervision. Committee: Stefano Soatto, Lieven Vandenberghe, Paulo Tabuada, Guy Van den Broeck.

UCLA

MS IN ELECTRICAL ENGINEERING 2015-2017 | Los Angeles, California

BILKENT UNIVERSITY

BS IN ELECTRICAL ENGINEERING 2011-2015 | Turkey Graduated within 3.5 years as a Valedictorian. 3.97 GPA out of 4.00.

SKILLS

Deep learning libraries: JAX, TensorFlow, Pytorch, Flax, Keras for VLM training Programming languages: Python (Google readability), C++, SQL, Matlab, Java

PATENTS

System and method for multi-agent reinforcement learning with periodic parameter sharing, 16/680,395.

Controlled style-content image generation based on disentangling content and style, 16/802,440.

Contrastive learning for object detection, 17/148,148.

GRADUATE COURSES

Nonlinear Dynamical Systems, Channel and Source Coding, Matrix Analysis, Adaptation and Learning, Convex Optimization, Stochastic Processes in Dynamical Systems, Linear Dynamical Systems, Learning and Reasoning with Bayesian Networks, Machine Perception, Machine Learning Algorithms, Algorithms and Complexity, Advanced Numerical Analysis (on ODEs), Probability Theory (Measure Theory).

AWARDS

Intel ISEF: Fourth Award in Mathematical Sciences, 2010

University Entrance Exam: Ranked as 68 among 1.6 million examinees, 2011.

EXPERIENCE

WAYMO | Senior Perception Engineer

February 2021 - Now | Mountain View, California

- Design and deployment of sensor (camera/laser/radar) fusion, 2D/3D object detection, depth prediction, segmentation models.
- Large model training and serving of robust, quantized foundational perception models on GPUs and TPUs.
- Authored 408, reviewed 261 changes, modified more than 330K lines as of October 28, 2023

WAYMO | INTERN

June 2020 - September 2020 | Mountain View, California

• object detection models, GNNs.

ADOBE RESEARCH | INTERN

June 2019 - September 2019 | San Jose, California

• GAN models (e.g. style GAN) for unsupervised domain adaptation.

HONDA RESEARCH INSTITUTE | INTERN

June 2018 - September 2018 | Mountain View, California

• multi-agent reinforcement learning algorithm.

SELECTED PUBLICATIONS

Safa Cicek and Alhussein Fawzi and Stefano Soatto, Saas: Speed as a Supervisor for Semi-Supervised Learning, European Conference on Computer Vision (ECCV). 2018.

Safa Cicek, Stefano Soatto, Unsupervised Domain Adaptation via Regularized Conditional Alignment, International Conference on Computer Vision (ICCV) as **oral (%4.6)**. 2019.

Alex Wong, **Safa Cicek**, Stefano Soatto, Learning Topology from Synthetic Data for Unsupervised Depth Completion, IEEE Robotics and Automation Letters (RAL). 2021.

Alex Wong, **Safa Cicek**, Stefano Soatto, Targeted Adversarial Perturbations for Monocular Depth Prediction, Conference on Neural Information Processing Systems (NeurIPS). 2020.

Safa Cicek, Ning Xu, Zhaowen Wang, Hailin Jin, Stefano Soatto, Generative Feature Disentangling for Unsupervised Domain Adaptation. European Conference on Computer Vision Workshop (ECCVW). 2020.

Safa Cicek, Ning Xu, Zhaowen Wang, Hailin Jin, Stefano Soatto, Spatial Class Distribution Shift in Unsupervised Domain Adaptation: Local Alignment Comes to Rescue. Asian Conference on Computer Vision (ACCV). 2020.

Safa Cicek, Stefano Soatto, Input and Weight Space Smoothing for Semi-supervised Learning, International Conference on Computer Vision Workshop (ICCVW). 2019.

Safa Cicek, Alireza Nakhaei, Stefano Soatto, Kikuo Fujimura, MARL-PPS: Multi-agent Reinforcement Learning with Periodic Parameter Sharing, International Conference on Autonomous Agents and Multiagent Systems (AAMAS). 2019.

Wong, Alex, et al. "Small Lesion Segmentation in Brain MRIs with Subpixel Embedding." International MICCAI Brainlesion Workshop, 2021.

REVIEWER

Conference on Neural Information Processing Systems (NeurIPS), 2023. Conference on Computer Vision and Pattern Recognition (CVPR), 2021. European Conference on Computer Vision (ECCV), 2020. Neural Processing Letters (NEPL), 2019.