
EDUCATION	<i>University of California, Santa Barbara</i>	<i>Santa Barbara, CA, USA</i>
	PhD in Electrical and Computer Engineering Advisor: Prof. Matthew Turk	GPA: 3.85 / 4.0 Expected: 2021
	<i>Poznan University of Technology</i>	<i>Poznan, Poland</i>
	MS in Mechatronics Advisor: Prof. Ewa Stachowska	GPA: 4.68 / 5.0 2014 – 2015
	<i>Poznan University of Technology</i>	<i>Poznan, Poland</i>
	BS in Mechatronics Advisor: Prof. Ewa Stachowska	GPA: 4.63 / 5.0 2010 – 2014
	<i>Online education</i>	
	<ul style="list-style-type: none">• PyTorch Scholarship Challenge – Facebook (Udacity)• Neural networks for machine learning – University of Toronto (Coursera)• Artificial intelligence for robotics – Stanford (Udacity)• Artificial intelligence – UC Berkeley (EdX)	
RESEARCH EXPERIENCE	<i>Microsoft Research</i>	<i>Redmond, WA, USA</i>
	Research Software Development Engineer	<i>Oct '19 – Jan '20</i>
	<ul style="list-style-type: none">• Research in long-tail and imbalanced classification• Designed new methods for long-tail classification• Outlined and performed experiments with existing and novel approaches in long-tail classification	
	Computer Vision Research Intern	<i>Jun '19 – Sep '19</i>
	<ul style="list-style-type: none">• Research in large-scale long-tail image recognition• Utilized adversarial training for imbalanced datasets• Worked on research solutions for an existing product	
	<i>University of California, Santa Barbara</i>	<i>Santa Barbara, CA, USA</i>
	Graduate Student Researcher – Four Eyes Lab	<i>Sep '16 – Jun '19</i>
	<ul style="list-style-type: none">• Research in machine learning algorithms for computer vision applications• Developed novel object classification algorithms for tasks with insufficient training data• Deep transfer learning for One-Shot / Few-Shot One-Class image recognition	
	<i>Samsung Research America</i>	<i>Mountain View, CA, USA</i>
	Computer Vision Intern – Think Tank Team	<i>Apr '18 – Sep '18</i>
	<ul style="list-style-type: none">• Object detection and tracking from the stereo vision for autonomous driving applications• Experimental stereo vision setups for autonomous driving applications• Deep learning for stereo matching and scene segmentation	
	<i>FLIR Systems</i>	<i>Santa Barbara, CA, USA</i>
	Deep Learning Engineer	<i>Jun '17 – Sep '17</i>
	<ul style="list-style-type: none">• Responsible for creating deep learning methods for pedestrian re-identification from camera images• Developed deep networks for semantically meaningful people and clothing descriptors• Deep pose estimation for better pedestrian re-identification	
	<i>Autodesk</i>	<i>Boston, MA, USA</i>
	Machine Learning Intern	<i>Jun '16 – Sep '16</i>
	<ul style="list-style-type: none">• Developed supervised learning algorithms to reflect user preferences in architectural documentation• Worked on automated object placement in a 2D space• Unsupervised clustering of architectural views	
	<i>University of California, Santa Barbara</i>	<i>Santa Barbara, CA, USA</i>
	Graduate Student Researcher – Intelligent and Predictive Systems Lab	<i>Oct '15 – Sep '16</i>
	<ul style="list-style-type: none">• Team leader in National Library of Medicine “Pill Image Recognition Challenge”• Developed machine learning algorithms for network data prediction• Performed unsupervised feature selection and classification of medical data sets	
	<i>Institute of Biocybernetics and Biomedical Engineering</i>	<i>Poznan, Poland</i>
	Research Intern	<i>Jun '12 – Jul '12</i>
	<ul style="list-style-type: none">• Performed scientific evaluation of the clinical usefulness of the designed devices• Completed 70+ page report analyzing patients data on Huntington Disease	

**TEACHING
EXPERIENCE****University of California, Santa Barbara***Santa Barbara, CA, USA***Teaching Associate – CS 32 Object Oriented Design and Implementation***Sep '20 – now*

- The lead instructor for the CS 32 – course on advanced C++ concepts
- Leading lectures, course organization, course materials preparation
- Course delivering synchronous and asynchronous instructions for ~100 undergraduate students

Teaching Associate – CS 165B Machine Learning*Jul '20 – Sep '20*

- The lead instructor for the CS 165 B
- Creating lecture materials, designing the course flow and lab assignments
- Leading lectures, course organization, course materials preparation
- Course delivering synchronous and asynchronous instructions for ~50 undergraduate students

Teaching Associate – INT 93LS Thinking Machines: A dive into the modern AI*Jun '20 – Jul '20*

- The lead instructor for Track 6 of Summer Research Academies (pre-college program)
- Designed a comprehensive course on Deep Learning
- Created lecture materials and lab assignments
- Mentored 27 high school students working on research projects in DL for Computer Vision
- Leading lectures, course organization, course materials preparation
- Course delivering synchronous instructions for 27 high school students

Teaching Associate – CS 32 Object Oriented Design and Implementation*Mar '20 – Jun '20*

- The lead instructor for the CS 32 – course on advanced C++ concepts
- Leading lectures, course organization, course materials preparation
- Course delivering synchronous and asynchronous instructions for ~120 undergraduate students

Stanford University*Stanford, CA, USA***Voluntary Section Leader – CS 106A Code in Place***Apr '20 – Jun '20*

- Leading weekly live practical coding sections for students
- Creating challenging programming problems for students

University of California, Santa Barbara*Santa Barbara, CA, USA***Teaching Assistant – CS/ECE 181 Introduction to Computer Vision***Jan '20 – Mar '20*

- Led discussion sections to explain novel concepts in machine learning
- Helped students with practical implementations of algorithms and their theoretical understanding
- Awarded with the Outstanding Electrical and Computer Engineering Teaching Assistant 2019-2020

Teaching Assistant – CS 165B Machine Learning*Jan '19 – Mar '19*

- Led discussion sections to explain novel concepts in machine learning
- Helped students with practical implementations of algorithms and their theoretical understanding

Teaching Assistant – ECE 152A Digital Design Principles*Jan '16 – Mar '16*

- Led computer labs classes where students designed and implemented electronic circuits
- Created and graded homework assignments and practice exercises

**STUDENT
ADVISING****Undergraduate***Scott Matsubara* (University of California Santa Barbara)*Fall 2020 - now**Clifford Xu* (University of California Santa Barbara)*Summer 2020 - now**Kemal Berk Kocabagli* (Visiting student from Bogazici University in Istanbul, Turkey)*Summer 2017***High school***Surya Jasper* (Saint Francis High School, Mountain View, CA)*Fall 2020 - now**Chloe Harrah* (Dos Pueblos High School, Goleta, CA)*Summer 2020 - now**Irina Malyugina* (The Harker School, San Jose, CA)*Summer 2020 - now**Debanshi Misra* (The Lawrenceville School, Lawrenceville, NJ)*Summer 2020 - now**Reha Matai* (The Quarry Lane School, Dublin, CA)*Summer 2020 - now**Youqi Huang* (Lynbrook High School, San Jose, CA)*Summer 2020 - now**Carol Tu* (Torrey Pines High School, San Diego, CA)*Summer 2020 - now***Mentoring**

Directly mentoring and advising 27 students during Summer Research Academies 2020 on their research projects. **Projects in submissions to journals.**

-
- PUBLICATIONS**
- [1] CLEAR: Cumulative LEARning for one-shot one-class image recognition
J. Kozerawski and M. Turk
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018
 - [2] BLT: Balancing Long-Tailed Datasets with Adversarially-Perturbed Images
J. Kozerawski, V. Fragoso, N. Karianakis, G. Mittal, M. Turk, and M. Chen
Asian Conference on Computer Vision (ACCV), 2020
 - [3] k-Similarity Networks for Few-Shot One-Class Recognition
J. Kozerawski, M. Turk
Ongoing
 - [4] Using Depth-aware Video Interpolation To Boost Frame Rate In Standard Real-life Footage
S. Jasper, C. Tu, W. Sun, **J. Kozerawski**
In Submission
 - [5] Analyzing Racial Bias in Facial Recognition Systems
A. Choi, S. Solaiappan, A. Zhang, **J. Kozerawski**
In Submission
 - [6] American Sign Language to Text Translation using Convolutional Neural Networks
P. Khashayar, B. Li, K. McLaughlin, **J. Kozerawski**
In Submission
 - [7] Identification and Classification of Skin Cancers using Deep Neural Networks
S. Missula, A. Kohli, K. Srivastava, **J. Kozerawski**
In Submission
 - [8] Using Grad-CAM to Improve Model Interpretability for COVID-19 and Viral Pneumonia Diagnosis from Chest X-Ray Scans
I. Malyugina, D. Misra, R. Matai, **J. Kozerawski**
In Submission

-
- CURRENT RESEARCH PROJECTS**
- [1] Bridging the gap between one-shot and few-shot learning in image recognition
 - [2] Reducing confusion factors in COVID-19 detection from chest x-rays
 - [3] Self-supervised knowledge extraction for image recognition explainability
 - [4] Dataset analysis using untrained networks

-
- GIVEN TALKS**
- “*Explaining concepts visually: a novel approach for general object recognition*” – at UCSB Dynamical Neuroscience seminar, Nov 2018
 - “*Explaining concepts visually: continuous AI learning*” – at UCSB CS Summit, Mar 2018 (**2nd Prize**)
 - „*SVM Transfer Learning for Object Recognition*” – at UCSB Society for Industrial and Applied Mathematics, Mar 2017
 - „*Deep Model Transition for Object Classification*” – at the Amazon’s Graduate Research Symposium, Seattle, WA, Jan 2017

-
- PROFESSIONAL ACTIVITIES**
- Associate Editor & Reviewer at the Journal of Emerging Investigators
 - Reviewer: AAAI, ACCV, ECCV, ICCV, CVPR, NeurIPS, WACV
 - Program Committee: AAAI 2020, AAAI 2021

-
- AWARDS**
- 2019-2020: Outstanding Electrical and Computer Engineering Teaching Assistant, UCSB
 - 2018: 2nd Prize on the Graduate Research Symposium at CS Summit, UCSB
 - 2015: Fulbright Scholarship – renounced, UCSB
 - 2011, 2012, 2013, 2014: Dean’s Scholarship
 - 2010: Award for the Best Incoming Freshman

-
- SKILLS**
- Python, PyTorch, Caffe, TensorFlow, OpenCV, Linux, C++, C, Git

REFERENCES

- Professor Matthew Turk
Computer Science Dept., UC Santa Barbara; President of Toyota Technological Institute at Chicago
Email: mturk@ucsb.edu
- Dr. Victor Fragoso
Senior researcher, Microsoft
Email: Victor.Fragoso@microsoft.com
- Professor Pradeep Sen
Electrical and Computer Engineering Dept., UC Santa Barbara
Email: psen@ucsb.edu