Curriculum Vitae – Azmi A. Haider

Hello world! I'm an experienced **algorithms engineer** in the field of **computer vision/ image processing**. I'm a focused self-learner looking for an interesting challenge dealing with machine learning/3D reconstruction/depth sensing/estimation and tracking in computer vision.

(1) Personal Details:

Mobile phone number: +972 547853396. Email address: azmi.haider92@gmail.com Website: https://www.azmihaider.com/

(2) Academic Training		
2021 – current	University of Haifa	Haifa, Israel
	PhD in computer science.	
	Research topic: Generative NeRFs*.	
	Supervisor: Dr. Dan Rosenbaum	
2017 - 2020	University of Haifa	Haifa, Israel
	MSc. (With research) In computer science.	
	Research topic: Forgery in 3D-sensor images*.	
	Supervisor: Dr. Hagit Hel-Or	
2012 - 2017	Technion- Israel Institute of Technology	Haifa, Israel
	BSc. In electrical engineering.	
	Major: Computer and software engineering.	
2011 - 2012	Technion- Israel Institute of Technology	Haifa, Israel
	pre-university education.	

(*) - more details on the dissertations on my website.

(3) Professional Activities:			
2022 – 2023	University of Haifa	Haifa, Israel	
	Teaching assistant – Image processing course		
2021 – 2022	Intel corporation	Haifa, Israel	
	Data scientist (part-time) for a face recognition project:		
	Work included implementing computer vision and image processing algorithms for detection/cleaning/synthesizing images to enlarge the training datasets for deep neural networks. Work also included a vast understanding of deep neural networks and tweaking them.		
2015 – 2021	Intel corporation	Haifa, Israel	
	Validation (part-time and full-time) for Intel's RealSense 3D cameras:		
	Defining and building assessment metrics for depth camera models:		
	 Research of existing image quality metrics. 		
	 Building (or acquiring) physical targets/boards required for a specific metric analysis. 		
	 Defining data collection parameters. 		
	Building computer vision/ image processing algorithmic implementations	of	
	classification/detection for each metric.		
	 Building automated analysis reports. 		

(4) Technical knowledge and Courses:

- Python (during data science work in Intel and in my PhD for the last 3-4 years)
 - o OpenCV
 - o PyTorch
- Matlab (during work at intel RealSense 3D cameras for 6 years)
- Knowledge in Machine Learning/Deep Learning/Generative Models
 - \circ ~ Courses at the university included: Machine Learning, Deep Learning.
 - Work in the PhD deals mostly with Generative models.
 - Check out deep learning projects on my Github (links below)
- Knowledge in Image processing, Computer vision and depth sensing
 - Courses at the university included: Image processing, Computer vision, Advanced topics in computer vision, Multiple view geometry in computer vision.
 - Work during master's degree included dealing with depth sensor and point clouds.

(5) Scores and awards:

2022 – current	DSRC scholarship for PhD students – data science research center, University of Haifa.	
2021 – current	Excellence scholarship for PhD students, University of Haifa.	
2020	Finished (master's degree) 3 rd in class – GPA: 94.	
2018 – 2019	Research funding: Israeli Science Foundation (ISF), University of Haifa.	
2018	Research funding: The Center for Cyber Law and Policy (CCLP), University of Haifa.	
2011 – 2016	N.A.M scholarship for Outstanding Arab Youth: Full degree scholarship, Technion.	

(6) Projects and publications:

2023	Deep learning project: Building Perfect-loop-gifs using NeRF.Universityhttps://github.com/AzmiHaider92/Perfect-loop-gif-nerfUniversity	ersity of Haifa
2022	Deep learning project: Painter by Number - a Kaggle ChallengeUniverhttps://github.com/AzmiHaider92/PainterByNumbers	ersity of Haifa
2022	Paper: What can we learn from depth camera sensor noise? https://www.mdpi.com/1424-8220/22/14/5448 Paper published in Sensors Journal.	
2021	Paper: Judicial Errors: Fake Imaging and the Modern Law of EvidenceUniversity of IIIThis is a joint work with the faculty of law in the university of Haifa about the use of visual prooof law. Published by the University of IIIinois Chicago.https://heinonline.org/HOL/LandingPage?handle=hein.journals/johnmars21÷=12&id=&page	linois Chicago if in the court <u>e=</u>
2018	Paper: Forgery detection in 3D-sensor images Lecture given as part of the CV-COP: the bright and dark sides of computer vision. The worksho CVPR in Salt Lake City, Utah, USA. <u>https://openaccess.thecvf.com/content_cvpr_2018_workshops/w32/html/Privman- Horesh_Forgery_Detection_in_CVPR_2018_paper.html</u>	Utah, USA p was part of