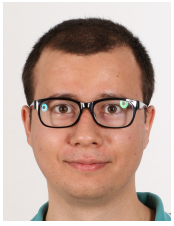
Görkem KILINÇ

grkemkilinc@gmail.com - +49 1638068169
www.linkedin.com/in/gorkemkilinc/
71069, Sindelfingen



EDUCATION

MSc Informatics. CGPA: 1.9 / 5.0 (German Grading System, ≈ 3.1 / 4.0 in UK/US Grading System)
October 2016 – July 2019
Technical University of Munich, Munich / Germany
Areas: Computer Vision, Artificial Intelligence
Master Thesis: Agent-based Traffic Simulation on FPGA using OpenCL

BSc Electrical and Electronics Engineering, CGPA: 3.03 / 4.0
September 2012 - June 2016
Middle East Technical University, Ankara / Turkey
Specialization: Computer
Bachelor Thesis: Disposing Garden Waste at the Neighbor's Cost
Built a robot from scratch which can detect cubical objects of the same color and dispose them over a fence in a team of four.

WORK EXPERIENCE

Firmware (Millicode) Developer
November 2019 – present
IBM
Böblingen / Germany
- Programming in IBM z microarchitecture assembly to support new cryptographic features as documented in z/Architecture Principles of Operation
- Supporting development of the emulation environment so that new cryptographic features can be tested

Research Assistant / Master Thesis Student – Agent-based Traffic Simulation on FPGA using OpenCL
October 2018 – April 2019
TUMCreate
Singapore
- Developed and performance optimized a simplified version of a traffic simulator on FPGA using OpenCL as a proof of concept.
- Investigated agent based simulation on FPGAs from performance perspective

Interdisciplinary Project Student – Pose Estimation via Deep Learning
October 2017 - March 2018
Retorio
UnternehmerTUM, Garching / Germany
- Programmed in Python in order to adapt a neural network to find the key features of the body
- Inferred the emotional state of the person from the sequence of spatial data about limbs via pre-defined set of rules

Co-Op Intern – Communication Protocol Implementation on FPGA using Verilog
June 2015 – August 2015
Turkish Aerospace Industries
Kazan, Ankara / Turkey
- Implemented I^2C protocol on FPGA
- Used the implemented communication protocol in order to communicate with on-board graphics controller in order to run the visuals of a simple game

Summer Intern – PLC Programming
July 2014 – August 2014
Arçelik AŞ
Çayırova, İstanbul / Turkey
- Controlled a pneumatic robot arm using PLC ladder logic

PROJECTS

- **Deep Learning for Computer Vision – TUM, July 2017**
  Detected and localized special kind of nerve groups by implementing and tweaking U-net architecture in a team of four
- **Digital Signal Processing – METU, January 2016**
  Implemented a spectrogram and equalizer / filter on Matlab from scratch
- **Digital Electronics – METU, April 2015**
  Implemented a simple shooter game on Altera DE-1 SoC using Verilog

SKILLS

Natural Languages : Turkish (Native), English (Fluent), German (B1)
Languages & Tools : zASM, C++, Python, Verilog, Matlab

Publications

- Jiajian Xiao, Görkem Kilinç, Philipp Andelfinger, David Eckhoff, Wentong Cai, and Alois Knoll. 2020. Pedal to the Bare Metal: Road Traffic Simulation on FPGAs Using High-Level Synthesis. In Proceedings of the 2020 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS '20). Association for Computing Machinery, New York, NY, USA, 117–121. https://doi.org/10.1145/3384441.3395979