

# AMEER SHALABI

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Tallinn University of Technology

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## EDUCATION

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### Tallinn University of Technology

*Doctor of Philosophy - PhD, Information and Communications Technology*

- Early Stage Researcher of the Center for Dependable Computing Systems
- Visiting Lecturer of Computer Systems

*Sept. 2019 – Current*

*Tallinn, Estonia*

### Tallinn University of Technology

*Master of Science - MSc, Computer and Systems Engineering*

- Member of the Center for Dependable Computing Systems

*Sept. 2017 – June 2019*

*Tallinn, Estonia*

### Bard College

*Bachelor of Arts - BA, Computer Science*

- Member of the Center for Dependable Computing Systems

*Aug. 2012 - May 2016*

*Annandale-on-Hudson, NY*

## EXPERIENCE

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### Center for Dependable Computing Systems at TalTech

*Early Stage Researcher*

- Researching security and reliability of high efficiency Computer Memory Systems.
- Researching in the field of embedded systems design and implementation.
- Assisting and cooperating with members of Center for Dependable Computing Systems on research of Reliability and Dependability of computer Systems.

*Sept. 2019 – Current*

*Tallinn, Estonia*

### Department of Computer Systems - TalTech

*Visiting Lecturer*

- Designing and Lecturing the IAS0430 Microprocessor Systems course during the Winter semester.
- Working closely with department head and staff on assisting with the development of both Introductory and Advanced Computer Architecture courses.

*Sept. 2019 – Current*

*Tallinn, Estonia*

### Center for Dependable Computing Systems at TalTech

*Research Intern*

- Researched topics of computer systems verification and computer architecture design and validation.
- Explored topics of Non-Volatile Memory (NVM) and Computation in Memory (CiM) in preparation for the master thesis.

*Sept. 2018 – May 2019*

*Tallinn, Estonia*

## SKILLS AND STRENGTHS

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### Natural Languages

Arabic (Native Language), English (Fluent)

### Programming Languages

#### Experienced:

- VHDL, Verilog, SysVerilog, Bash Script, Tex, MATLAB

#### Intermediate:

- SQL, Python, Java, C, C++, TCL

#### Basic:

- R, HTML, CSS, Prolog, Processing

### Tools

#### Experienced:

- Synopsys, Cadence tools, ModelSim, Overleaf, MS office, Moodle
- Linux Command Line

#### Intermediate:

- Vivado, github, Visual Studio, SPICE, Google Docs, VirtualBox

#### Basic:

- Looker, PyCharm, Tableau, Power BI

## CERTIFICATIONS AND TRAINING

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### imec academy

- VHDL language and design flow – Oct. 2019
- Essential verification with SystemVerilog – Nov. 2019 (issued 2021)

### MathWorks

- MATLAB Fundamentals – Jan. 2021

### LinkedIn Learning

- Become a SQL Developer – Jan. 2021
- Become a Data Analyst – Jan. 2021
- Become a Data Scientist – Feb. 2021

### Coursera

- Introduction to Data Science in Python – Feb. 2021
- Very Large Scale Integrated Circuit Computer Aided Design (VLSI CAD) – Ongoing.

*For credentials and further information, please see LinkedIn profile.*

## PUBLICATIONS

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- [1] A. Shalabi, *FLD: A FIFO/LRU Decision Algorithm for Managing L1 Private Cache in Heterogeneous Processors*. Bachelor's thesis, Bard College, 2016.
- [2] A. Shalabi, *Performance and Energy Evaluation of NVM-Based CIM and Memory Hierarchy*. Master's thesis, Tallinn University of Technology, 2019.
- [3] A. Shalabi, K. Paul, T. Ghasempouri, and J. Raik, "NV-SP: A New High Performance and Low Energy NVM-Based Scratch Pad," in *2020 IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, (Los Alamitos, CA, USA), pp. 54–59, IEEE Computer Society, 2020.
- [4] A. Shalabi, T. Ghasempouri, P. Ellervee, and J. Raik, "SCAAT: Secure Cache Alternative Address Table for mitigating cache logical side-channel attacks," in *2020 23rd Euromicro Conference on Digital System Design (DSD)*, (Kranj, Slovenia), pp. 213–217, IEEE, 2020.