

Xueshan Zhang

Master of Science. **Nanoelectronics**

- 20.08.1994
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Social Network -

- in Linkedin
- Github
- Git Page

About Me -

- Goal-oriented team player and deadline catcher:
- Able to work with multiple tasks and multi-cultural background;
- Solid knowledge of programming tool and environments, e.g Linux, python;
- Intensive experience with embedded firmware

Interests -

- Photography
- Cooking
- Music
- Fitness

Education

Master of Science, Nanoelectronics GPA: 13.6/20.0 (Cum Laude)

10.2018 -Technische Universität Dresden (TU Dresden) Dresden, Germany 02.2020 In-depth studies on electronics technology, e.g. 'Molecular Electronic', 'Nano Optics' and etc.

09.2017 -Katholieke Universiteit Leuven (KU Leuven) Leuven, Belgium Take in fundamental and also state-of-art knowledge in semiconduc-02.2020 tors field, e.g. 'Semiconductor Devices', 'Integrated Circuits Packaging' and 'Electrical Components, Circuits and Sensors' and etc.

Bachelor of Engineering, Material Science and Engineering GPA: 3.35/4.0 (Top 20 %)

09.2013 -University of Jinan (UJN) Jinan, China 07.2017 Enhanced understanding of material science and engineering by courses 'Materials Physics', 'Material Science Foundation' and etc.

🕹 Work Experience

01.2021 -Until Now

Validation Engineer (Yangtze Memory Technologies)

Shanghai, China

Tasks & Achievements:

- Build test bench for post-Silicon Nand Flash storage devices;
- Trouble shoot front-end and back-end function, and performance bugs of storage devices by debugging with linux kernel, scripts and hardware tools (e.g protocol analyzer);
- Understand the operating principle of power management ICs through datasheets and test results via design for test;
- Collect information and identify fundamental pattern, or trends in data by data analysis;
- Develop strategies/algorithms for analyzing results from main stream analysis software out of the purpose of competitor analysis and figure out weak points of pre-stage design;

Learning Outcomes:

- Experience with high-speed peripheral PCIe bus validation and de-
- Experience with general connectivity IPs (I2C / UART);
- Experience in multi-threaded / parallel programming;
- Mainly with Python; experience with C, html and shell scripts.

06.2020 -12.2020

Process Support Engineer (Applied Materials)

Jinan, China

Tasks & Achievements:

- Measure critical parameters on eBeam-source wafer images with knowledge on eBeam imaging and image segmentation;
- Distinguish the types of process defects based on a large quantity of eBeam images using binary search tree algorithm, and analyze which stage of process may cause such defects;

Learning Outcomes:

- Image processing:
- Soft binning and binary search tree algorithm.

Patents

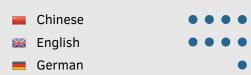
An algorithm of SSD competitor 03.2023 Yangtze Memory Technologies analysis with PCMark10 Software Xueshan Zhang Automated deployment of software

12.2022 Yangtze Memory Technologies testing environment Xueshan Zhang et al.

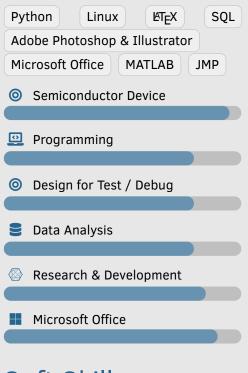
Xueshan Zhang

Master of Science, Nanoelectronics

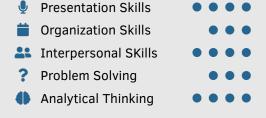
Languages



Hard Skills -



Soft Skills



Projects

Germany

04.2019 – 10.2019

Investigating High-Performance Semiconductor Coating Recipes on a mechanically flexible, plastic CFAED, Dresden substrate

Tasks & Achievements:

- Design the architecture of organic thin film transistor (OFET), manufacture it according to design flow;
- Evaluate comprehensively the process defects of thin film component, I-V performance of OFET as a whole and performance reliability of OFETs;

Learning Outcomes:

- Device failure analysis;
- Device Design.

11.2018 – 04.2019

Thermo-Optic Effect on Waveguide in Mach Zehnder Modulator

TU Dresden, Dresden

Tasks & Achievements:

- Design an integrated optics structure and simulate the thermooptic influence on the output optical signals in simulation software 'Lumerical';
- Develop a method of achieving higher throughput of light modes and simulated signals with higher accuracy;

Learning Outcomes:

- Finite Element Method;
- Integrated optics design;
- Data visualization with Matlab.

Belgium

03.2018 – 05.2018

Acoustic Characterization of PMUT for Gesture Recognization

IMEC, Leuven

15.2018 **3**

Tasks & Achievements:

- Evaluate performance of designed PMUT arrays and analyze test results:
- Present test results based on existing PMUT structure and propose advice on changing PMUT's design to improve single PMUT performance while avoiding cross-talk among neighboring PMUTs.

Learning Outcomes:

- Signal sensitivity analysis;
- Data visualization with MATLAB.

S Referee

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Applied Materials

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Germany Stefan Mannsfeld

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April 8, 2023