



Xueshan Zhang

Master of Science,
Nanoelectronics

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Social Network

- LinkedIn
- CSDN
- Git Page

About Me

- Goal-oriented team player and deadline catcher;
- Process with multi-tasks and quickly absorb in multi-cultural background;
- Extensive work experience with programming in validating product and data analysis;
- Familiar with failure analysis using hardware tools and test platform setup;

Interests

- Swimming
- Photography
- Music

Education

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

- 10.2018 – 02.2020 **Technische Universität Dresden (TU Dresden)** Dresden, Germany
In-depth studies on electronics technology, e.g. 'Molecular Electronic', 'Nano Optics' and etc.
- 09.2017 – 02.2020 **Katholieke Universiteit Leuven (KU Leuven)** Leuven, Belgium
Take in fundamental and also state-of-art knowledge in semiconductor 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 – 07.2017 **University of Jinan (UJN)** Jinan, China
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 :

- Involve in validating product design, embedded firmware and reliability of storage products before its mass production phase;
- Design test case with respect to PMIC and etc. with concurrent and parallel programming and etc. in python;
- Do failure analysis making use of hardware tool and softwares, mainly on linux operating system, with required knowledge base on protocols, firmware, controller, PCIe topology and CPU architecture;
- Develop self-adapting software tool to improve the level of automated test execution, data analysis on human resource investment and data management;

Learning Outcomes :

- Python, Golang, Markdown and etc.;
- Protocols, e.g PCIe, NVMe and etc.;
- Git distributed version control system, Altassian softwares;
- Data analysis, e.g pandas, numpy, matplotlib and etc.;
- Test platform setup, including hardware and software

- 06.2020 – 12.2020 **Process Support Engineer (Applied Materials)** Jinan, China

Tasks & Achievements :

- Process eBeam graphics via edge / are segmentation, and realize rough binning via crude decision trees;

Learning Outcomes :

- Image processing, e.g. edge / area segmentation methods;
- Crude decision trees for rough binning;
- e-Beam tool mechanical structure and physical theories behind;




Awards

- 02.2020 Cum Laude Graduate Leuven, Belgium
- 07.2017 All-Round Development Scholarship - 1st Prize (1/41) Jinan, China
- 06.2017 Bachelor Thesis Competition (Department Level) - 1st Prize (10 %) Jinan, China
- 08.2015 National English Competition for College Students (NECCS) - Type C - 1st Prize (5 %) Jinan, China

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Languages

 Chinese	● ● ● ●
 English	● ● ● ●
 German	●

Hard Skills

Python Linux \LaTeX SQL

Adobe Photoshop & Illustrator

Microsoft Office MATLAB JMP

🎯 Semiconductor Device
● ● ● ● ●

💻 Programming
● ● ● ● ●

🎯 Design test case / failure analysis
● ● ● ● ●

📊 Data Analysis
● ● ● ● ●

🔍 Research & Development
● ● ● ● ●

🏢 Microsoft Office
● ● ● ● ●

Soft Skills

🎤 Presentation Skills ● ● ● ●

📅 Organization Skills ● ● ●

👥 Interpersonal Skills ● ● ● ●

❓ Problem Solving ● ● ●

🧠 Analytical Thinking ● ● ● ●

Research

Germany

04.2019 –
10.2019

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

Tasks & Achievements :

- Design semiconductor devices architecture, manufacture it under certain flow and later use related equipments to evaluate its functionality and reliability;
- Utilize excel VBA or Origin script to do device failure analysis, optimize process flow to improve products performance and yield.

Learning Outcomes :

- Device failure analysis;
- Batch data processing by using Excel VBA and Origin;
- \LaTeX scripting language.

11.2018 –
04.2019

Thermo-Optic Effect on Waveguide in Mach Zehnder Modulator TU Dresden, Dresden

Tasks & Achievements :

- Mastered using script language embedded in simulation software 'Lumerical' in a short time to set up a previously designed integrated optics structure and related thermo-optic influence simulation model, reflecting in a way of 3D converged thermal gradient and calculated light modes;
- Proposed suggestions on how to optimize simulation for higher throughput and more accurate results.

Learning Outcomes :

- Knowledge of Finite Element Modelling;
- Research & development skills in integrated optics;
- Data visualization via MATLAB programming.

Belgium

03.2018 –
05.2018

Acoustic Characterization of PMUT for Gesture Recognition IMEC, Leuven

Tasks & Achievements :

- Design for testing on PMUT arrays with semiconductor analysis equipment;
- Put forward advice on how to develop single PMUT performance while reduce cross-talk between neighboring PMUTs.

Learning Outcomes :

- Scenario and signal sensitivity analysis;
- Data visualization via MATLAB programming.

Referee

Singapore

Yiau Yee Chia
Applied Materials
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Germany

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Belgium

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July 7, 2022

Xueshan Zhang