

## **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 – 02.2020	Technische Universität Dresden (TU Dresden) In-depth studies on electronics technology, e.g. tronic', 'Nano Optics' and etc.	Dresden, Germany 'Molecular Elec-	
09.2017 –	Katholieke Universiteit Leuven (KU Leuven)	Leuven, Belgium	
02.2020	Take in fundamental and also state-of-art knowledge in semiconduc-		
	tors field, e.g. 'Semiconductor Devices', 'Integrated Circuits Packag-		
	ing' and 'Electrical Components, Circuits and Sens	sors' 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 and monitors for DUT using python, and trouble shoot function/performance/FW bugs via SW, linux kernel and HW tools (e.g protocol analyzer);
- Collect information and identify fundamental pattern / trends in data by developing automated GUI tool;
- Hands-on experience in setting up hardware test platform;
- Analyze failures and actively drive issues to closure;

### Learning Outcomes:

- Experience with high-speed peripheral PCIe bus validation and de-
- Experience with test equipment and tool such as protocol analyzer and oscilloscope;
- Experience with general connectivity IPs (I2C/UART);
- Experience with script language such as Python, Go, and shell scripts:
- Data analysis and data mining;

06.2020 -12.2020

### **Process Support Engineer (Applied Materials)**

Jinan, China

#### Tasks & Achievements:

- Inspect early phase products with eBeam inspection and metrology
- Process obtained 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;

### Q Awards

02.2020	Cum Laude Graduate	Le	uven, Belgium
07.2017	All-Round Development Scholarship - $1^{st}$	Prize (1/41)	Jinan, China
06.2017	Bachelor Thesis Competition (Departmen	it Level) - $1^{st}$	Jinan, China
	Prize	(10 %)	
08.2015	National English Competition for College	Students	Jinan, China
	(NECCS) - Type C - $1^{st}$ Prize	(5 %)	

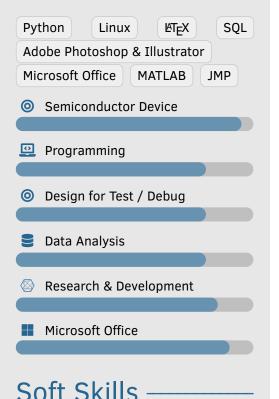
## Xueshan Zhang

Master of Science, Nanoelectronics

## Languages



## Hard Skills -



Presentation Skills

Organization SkillsInterpersonal Skills

Problem Solving

Analytical Thinking

# **Projects**

### Germany

04.2019 – 10.2019 Investigating High-Performance Semiconductor

Coating Recipes on a mechanically flexible, plastic CFAED, Dresden substrate

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 failture 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 Recognization

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.

## **O** Referee

Singapore

Yiau Yee Chia

Applied Materials

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Belgium

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