# Yuefeng Wu

Soschdijk 17K, 5612 HA, Eindhoven, The Netherlands

Born on Nov. 16th, 1992 in Tieling, Liaoning, China

# Education

M.Sc. Eindhoven University of Technology, Eindhoven, The Netherlands

Present Specialty: Embedded Systems, GPA: 8.5/10

Exit university of EIT Digital Master School Aug. 2016

M.Sc. KTH, Royal Institute of Technology, Stockholm, Sweden

July 2016 Specialty: Embedded Systems, GPA: 4.62/5 Entry university of EIT Digital Master School

Aug. 2015

B.E. Tianjin University, Tianjin, P.R.China

July 2015 Specialty: Communication Engineering, GPA: 3.73/4, Ranking: 8/106

Sept. 2011 Faculty: School of Electronic Information Engineering (SEIE)







mec

# Work Experience

#### Present Jan. 2017

#### Master's Thesis Intern, imec NL, Eindhoven, The Netherlands

> Supervised by Prof. Dr. Francky Catthoor, Dr. Anup Kumar Das, and Dr. Ir. Bart Mesman.

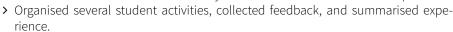
- > Explore the communication mechanisms in neuromorphic computing.
- > Extend Noxim for simulation of neuromorphic NoCs.
- > Explore the possibility to apply the segmented-bus architecture to neuromorphic chips.
- > Research on cluster mapping strategies for the neuromorphic architecture.

SystemC | C++ | Spiking Neural Network | Network-on-Chip | Noxim | CARLsim | Mesh Network | Segmented-Bus |

July 2015 Sept. 2012

# Student Assistant, SEIE of Tianjin University, Tianjin, P.R.China

> Assisted student counsellors with daily affairs and maintained office computers.



> Explained knowledge points of professional courses to students who have learning difficulties.

Communication Skills Computer Maintenance Organisational Capabilities Knowledge Explanation



# </>> Projects

# Jan. 2017

#### IoT Broker of Smart Office Lighting System

Nov. 2016

- > Course project of Internet of Things.
- > Designed the architecture of the broker.
- > Implemented the app on Android for users to control lights.
- > Implemented the broker's HTTP interfaces to the building manager's server and the user app.
- > Integrated external applications, e.g. Avahi, Leshan, to the broker's program.
- > Comprised and formatted the final report, and corrected grammatical flaws.

Java Linux Android IntelliJ Idea Maven GSON MongoDB Leshan (LWM2M) Avahi (mDNS/DNS-SD) Mosquitto (MQTT) VirtualBox HTTP Protocol Git

Sept. 2016 Nov. 2016

#### Design of Dynamic Channel Selection Mechanism

- > The course project of Networked Embedded Systems.
- > Designed and implemented the mechanism for IEEE 802.15.4 on Contiki OS.
- > Simulated the mechanism with Cooja Simulator and analysed the results.
- > Composed the project report in academic English.

C++ ContikiOS Cooja | IEEE 802.15.4 | Git | LATEX

#### Apr. 2016

#### Social-Networking App Based on Bluetooth Tags

- > A solution to the Fashathon held by Future Fashion to provide a creative method for social networking.
- > Designed the initial idea based on the challenges and supplied components with the teammates.
- > Developed an Android app for demonstration in half a day.

Java Android Android Studio Bluetooth

#### Mar. 2016

#### Digital Image Processing Application on Multiprocessor Platform

- Feb. 2016 > Laboratory work of Embedded Software.
  - > Implemented gray-scale and edge detection algorithms on a penta-core platform.
  - > Optimised the code and achieved the highest throughput in the class (almost three times as much as the passing standard).

C++  $\mu$ C/OS-II NIOS-II Multi-core Programming Real-time System Git  $\mu$ Eclipse

#### Sept. 2015

#### Eye-Protection Application Based on Tobii EyeX

- > A solution to a weekend hackathon to assist users to maintain correct reading posture.
- > Implemented the demo application with Visual C++ in one day.

Visual C++ Tobii SDK Visual Studio

#### June 2015 Dec. 2014

#### Bachelor's Thesis: Security Mechanism Design for Wireless Networks and IoT Systems

- > Designed an authentication mechanism for wireless networks of IoT and mobile devices.
- > Implemented the mechanism demo with Android devices and CC2530 ZigBee modules.
- > Awarded excellent graduation thesis.

C Java Android NFC Wi-Fi ZigBee Eclipse

# May 2015

#### User Identity Authentication and Exchange System

Apr. 2014

- > A system to transfer the authenticated user identity to another device via a secured NFC connection.
- > Implemented face detection and verification with cloud computing API (Face++).
- > Designed and implemented a secured data exchange mechanism based NFC connection.
- > Funded by National Student Innovation Training Program (STITP).

Java Android NFC HTTP Face++ API Eclipse

#### May 2015 Apr. 2014

#### Military Goose Step Evaluation System

- > A system to measure and grade orderliness of the goose steps of different squares objectively.
- > Designed the evaluation algorithm and implemented the system with NI LabView.
- > Awarded the first prize in 13th Challenge Cup of Tianjin.
- > Covered by several mainstream media in China.

NI LabView | Signal Processing | Wavelet Noise Reduction

## ≓ Professional Skills

Programming Languages: Java, C\C++, SystemC, Python, LabView, Ada, Basic, Shell, Assembly, R

Programming Platform: Android, Linux,  $\mu$ C/OS-II, Contiki OS, Microsoft Windows

Development Tools: IntelliJ Idea, Visual Studio, Understand, Maven, Git, Qt, MongoDB, GSON

**Operating Systems:** Microsoft Windows, Ubuntu Linux, Raspbian Simulators: Noxim, Simics, Multisim, Proteus, Emergent



### 🔼 Language

Mandarin • • • Dutch • • O O O

English • Swedish OOOO

Highest Number of Votes



**Outstanding Graduates of Tianjin University** 

2015 **Excellence Nomination Scholarship from EIT Digital** Highest Level

2015 **Top 10 Youth of SEIE** 

2014 **National Scholarship for Undergraduates** 0.2%

2013 Tan Xu Guang Scholarship of Tianjin University 20/20000+