

# Yuefeng Wu

+31 6-53296111 @ wyf1116@gmail.com  
in linkedin.com/in/yuefeng-wu-cn1116 github.com/innerTide  
Boschdijk 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  
*Aug. 2016* | Exit university of EIT Digital Master School
- M.Sc.** | KTH, Royal Institute of Technology, Stockholm, Sweden  
*July 2016*  
**Specialty :** Embedded Systems, GPA : 4.62/5  
*Aug. 2015* | Entry university of EIT Digital Master School
- 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)



## 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
- Miscellaneous :**  $\text{\LaTeX}$ , VirtualBox, OriginPro, Microsoft Office, Computer and Smartphone Maintenance

## 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 to simulate of neuromorphic NoCs.
  - Explore the possibility to adopt 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.
  - Organised several student activities, collected feedback, and summarised experience.
  - Explained knowledge points of professional courses to students who have learning difficulties.



Communication Skills Computer Maintenance Organisational Capabilities Knowledge Explanation

## Projects

- Jan. 2017*  
*Nov. 2016* | **IoT Broker of Smart Office Lighting System**
- The 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.
  - Co-debugged the program with the other group working on the server application.

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

Sept. 2016 Nov. 2016	<b>Design of Dynamic Channel Selection Mechanism</b> <ul style="list-style-type: none"> <li>&gt; The course project of Networked Embedded Systems.</li> <li>&gt; Designed and implemented the mechanism for IEEE 802.15.4 on Contiki OS.</li> <li>&gt; Simulated the mechanism with Cooja Simulator and analysed the results.</li> <li>&gt; Composed the project report in academic English.</li> </ul> C++ ContikiOS Cooja IEEE 802.15.4 Git $\LaTeX$
Apr. 2016	<b>Social-Networking App Based on Bluetooth Tags</b> <ul style="list-style-type: none"> <li>&gt; A solution to the Fashathon held by Future Fashion to provide a creative method for social networking.</li> <li>&gt; Designed the initial idea based on the challenges and supplied components with the teammates.</li> <li>&gt; Developed an Android app for demonstration in half a day.</li> </ul> Java Android Android Studio Bluetooth
Mar. 2016 Feb. 2016	<b>Digital Image Processing Application on Multiprocessor Platform</b> <ul style="list-style-type: none"> <li>&gt; Laboratory work of Embedded Software.</li> <li>&gt; Implemented gray-scale and edge detection algorithms on a penta-core platform.</li> <li>&gt; Optimised the code and achieved the highest throughput in the class (almost three times as much as the passing standard).</li> </ul> C++ $\mu$ C/OS-II NIOS-II Multi-core Programming Real-time System Git $\LaTeX$ Eclipse
Sept. 2015	<b>Eye-Protection Application Based on Tobii EyeX</b> <ul style="list-style-type: none"> <li>&gt; A solution to a weekend hackathon to assist users to maintain correct reading posture.</li> <li>&gt; Implemented the demo application with Visual C++ in one day.</li> </ul> Visual C++ Tobii SDK Visual Studio
June 2015 Dec. 2014	<b>Bachelor's Thesis : Security Mechanism Design for Wireless Networks and IoT Systems</b> <ul style="list-style-type: none"> <li>&gt; Designed an authentication mechanism for wireless networks of IoT and mobile devices.</li> <li>&gt; Implemented the mechanism demo with Android devices and CC2530 ZigBee modules.</li> <li>&gt; Awarded excellent graduation thesis.</li> </ul> C Java Android NFC Wi-Fi ZigBee Eclipse
May 2015 Apr. 2014	<b>User Identity Authentication and Exchange System</b> <ul style="list-style-type: none"> <li>&gt; A system to transfer the authenticated user identity to another device via a secured NFC connection.</li> <li>&gt; Implemented face detection and verification with cloud computing API (Face++).</li> <li>&gt; Designed and implemented a secured data exchange mechanism based NFC connection.</li> <li>&gt; Funded by National Student Innovation Training Program (STITP).</li> </ul> Java Android NFC HTTP Face++ API Eclipse
May 2015 Apr. 2014	<b>Military Goose Step Evaluation System</b> <ul style="list-style-type: none"> <li>&gt; A system to measure and grade orderliness of the goose steps of different squares objectively.</li> <li>&gt; Designed the evaluation algorithm and implemented the system with NI LabView.</li> <li>&gt; Awarded the first prize in 13th Challenge Cup of Tianjin.</li> <li>&gt; Covered by several mainstream media in China.</li> </ul> NI LabView Signal Processing Wavelet Noise Reduction

## Language

Mandarin   
Dutch 

English   
Swedish 

## Awards

2015	<b>Outstanding Graduates of Tianjin University</b>	5%
2015	<b>Excellence Nomination Scholarship from EIT Digital</b>	Highest Level
2015	<b>Top 10 Youth of SEIE</b>	Highest Number of Votes
2014	<b>National Scholarship for Undergraduates</b>	0.2%
2013	<b>Tan Xu Guang Scholarship of Tianjin University</b>	20/20000+