

Yuan Ho

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EDUCATION

**Graduate Institute of Communication Engineering,
National Taiwan University**

*Taipei, Taiwan
Sep. 2001 – Jun. 2003*

- Master of Science
- Master's thesis: "An Initial Study on Automatic Summarization of Chinese Spoken Documents"
- Supervisor: Professor Lin-Shan Lee
- Average: 90.94/100; ranking: 13th/87

**Department of Electrical Engineering,
National Taiwan University**

*Taipei, Taiwan
Sep. 1996 – Jun. 2000*

- NTU is the top 1 university in Taiwan
- EE, NTU is the top 1 engineering and science school in Taiwan
- Bachelor of Science in Engineering
- Average: 90.92/100; ranking: 2nd/158

PROFESSIONAL EXPERIENCE

MediaTek Inc., wireless communications software department
System on Chip Software Engineer

*Hsinchu, Taiwan
Jun. 2003 – Oct. 2013*

- MediaTek is the world's 4th largest IC design company
- 2G (GSM/GPRS) modem development
 - Hardware simulation and network simulation
 - TTY (CTM) modem driver design, coding, and testing
- 3G (WCDMA) modem development
 - Physical layer driver design, coding, and testing
 - RF driver design, coding, and testing
 - HW-SW co-simulation, FPGA, EVB integration test and debug
- 3.5G (HSPA+) modem development
 - Physical layer driver design, coding, and testing
 - 3GPP conformance test and in-operator test
 - Field try performance analysis and improvement
- 4G (LTE) modem development
 - DSP firmware performance optimization

Self-learning

- Web technologies
- Machine learning

*Hsinchu, Taiwan
Nov. 2013 – May, 2017*

MediaTek Inc., wireless communications software department
Senior System on Chip Software Engineer

Hsinchu, Taiwan
Jun. 2017 – Present

- 5G (NR) modem development
 - Software/firmware partition, interface discussion, and architecture design
 - Cross-site communication and negotiation
- Introduction of machine learning into modem driver development

AWARDS & HONORS

- Presidential Award * 6** *EE, NTU, 1996 – 2000*
- For the top 5% of students in the department each semester
- Teaching Assistant** *GICE, NTU, 2001 – 2002*
- Course: “Digital Signal Processing” and “Signals and Systems”
- Texas Instruments DSP Solutions Design Challenge – Excellent Award** *1999*
- Subject: “DSP Technique on Laser Doppler Velocimetry for Measurements of Blood Flow”
- International Physics Olympiad Competition national team training camp** *1996*
- For selected 25 excellent high school students nationwide
- National Math Competition for high school students – 3rd place** *1995*

PATENTS

Signal processing method and communication apparatus utilizing the same

U.S. Patent 8,463,198, filed Jul. 15, 2009, issued Jun. 11, 2013

- Yuan Ho, WS Yin, JY Tsai, IP Chang, Lucien Huang, EricCC Hsu
- A novel method to reduce call-drop rate and handover delay by tweaking the filtering algorithm of measurement reporting.

Power adaptation apparatus and power adaptation method for controlling uplink/downlink power

U.S. Patent 9,185,660, filed Feb, 6, 2012, issued Nov. 10, 2015

- Ralf Weng, Yuan Ho, Joe Li, Charles Hsu, Jerry Ho, QZ Huang
- A novel method to increase uplink throughput by adjusting the uplink power ratio between data channel and control channel using HARQ ACK rate as an indicator.

PUBLICATION

- [1] Lin-Shan Lee, Yuan Ho, Jia-Fu Chen, Shun-Chuan Chen, ‘**Why is the Special Structure of the Language Important for Chinese Spoken Language Processing? – Examples on Spoken Document Retrieval, Segmentation, and Summarization,**’ EUROSPEECH 2003 – INTERSPEECH 2003, 8th European Conference on Speech Communication and Technology, Geneva, Switzerland, 1–4 September 2003.

RELATED SKILLS

Programming languages: C, C++, Python

Engineering tools: Hardware simulator, network simulator