

# YU-CHENG(JUSTIN) CHIOU

<https://yc-chiou.github.io>

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## EDUCATION

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<b>University of Tromsø</b> , Tromsø, Norway <i>Ph.D. student, Department of Physics and Technology</i> Research Project: Direct growth graphene on semiconductor substrate	Apr. 2019 - present
<b>Masdar Institute</b> , Abu Dhabi, UAE <i>Graduate School, Department of Micro System(withdrawal, family affair)</i>	Sep. 2016 - Apr. 2018
<b>National Taiwan University</b> , Taipei, Taiwan <i>Graduate School, Department of MSE(auditor)</i>	Sep. 2013 - Feb. 2015
<b>University of Manchester</b> , Manchester, UK <i>Master of Science in Advanced Engineering Materials</i>	Jun. 2010 - Dec. 2011

## RESEARCH EXPERIENCE

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<b>Power data analytics</b> <i>Side Project</i>	Apr. 2019 - Present
<b>Graphene study</b> <i>Project</i> Varied temperature growth induce mixture of sp2 and sp3 bonding. Graphene growth on arbitrary substate, Ge GaAs etc.	May. 2018 - Present
<b>Soil classification</b> <i>Side Project</i>	May. 2017 - Apr. 2018
<b>2D-Materials Growth, AFM, First Principle</b> <i>Side Project</i>	Sep. 2016 - Apr. 2018
<b>Nano-Materials Growth</b> <i>Side Project</i>	Sep. 2013 - Feb. 2015
<b>Microwave Dielectric Ceramics</b> <i>Master Thesis Project</i>	Jun. 2010 - Dec. 2011

## WORK EXPERIENCE

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<b>Intel Microelectronic Asia Ltd.</b> , Taipei, Taiwan <i>Senior Hardware Testing Engineer</i>	Feb. 2016 - Aug. 2016, Jan. 2013 - Aug. 2013
<ul style="list-style-type: none"><li>· Developed new products and testing plans for new products.</li><li>· Coordinated resources for the USA headquarter and vendors, including Broadcomm, Realtek and Qualcomm, to fulfill technical and quality requirements of new products as well as assisting clients in phasing in this new Intel products into their future product lines.</li><li>· Engineered sample fabrications, including soldering, Jumper, and etc.</li></ul>	

- Implemented failure analysis, debugging and product improvements of current products.
- Delivered NPI internal trainings to FAEs, AEs, and PMs as well as annual workshops to partners and clients.

**Topco Scientific**, Taipei, Taiwan  
*Executive Assistant to CEO*

Oct. 2013 - Jan. 2016

- Surveyed novel materials for future use in transistors, solar cells and LEDs and reported to CEO directly.
- Investigated in market trend of future semiconductor industry.

**National Chiao Tung University**, Hsinchu, Taiwan  
*Research Assistant*

Apr. 2012 - Aug. 2012

- Participated in wireless sensor networks design and application.
- Designed wireless surveillance system with information security mechanism.
- Investigated in super-capacitor recharge mechanism analysis-material selection.

**Republic of China Air Force**, Taipei, Taiwan  
*Sr. Aircraft Maintenance Aircraftman*

Jul. 2008 - Jul. 2009

Implemented routine maintenance.

**Guang Hua Digital Plaza**, Taipei, Taiwan  
*Technical Support Engineer and Sales*

Nov. 1998 - Apr. 2004

- Provided technical knowledge to customers (mainly 3C products and PC components).
- Customized computers of various customer needs.
- Issued reproduce and consult for clients.

## SKILLS

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<b>Computer Skills</b>	Matlab, C/C++, Python, Scheme
<b>Simulation Skills</b>	Sentaurus TCAD, Quantum Espresso
<b>Analytical Instruments</b>	SEM, Optic Microscopy, XRD, Raman Spectroscopy

## PUBLICATION

### Master Thesis

- Yu-Cheng Chiou, "Microwave Dielectric Ceramics," School of Materials, University of Manchester, 2011.

### Journal Papers

- Sohail Shah, Yu-Cheng Chiou, Chia Yun Lai, Harry Apostoleris, Md.Mahfuzur Rahman, Hammad Younes, Ibraheem Almansouri, Amal Al Ghaferi, and Matteo Chiesa, "Impact of short duration, high-flow H<sub>2</sub> annealing on graphene synthesis and surface morphology with high spatial resolution assessment of coverage," *Carbon* 2017, vol. 125, pp.318-326.
- Harry Apostoleris, Yu-Cheng Chiou, Matteo Chiesa, and Ibraheem Almansouri, "Spectral management for temperature control in photovoltaic systems," *Optics for Solar Energy* 2017.
- Yu-Cheng Chiou, Tuza Adeyemi Olukan, Mariam Ali Almahri, Harry Apostoleris, Cheng- Hsiang Chiu, Chia-Yun Lai, Jin-You Lu, Sergio Santos, Ibraheem Almansouri, and Matteo Chiesa, "Direct Measurement of the Magnitude of the van der Waals Interaction of Single and Multilayer Graphene," *Langmuir*, 2018.