

**Dr Cheng-Kuang Lee**  
Senior Solution Architect  
NVIDIA AI Technology Center  
NVIDIA  
Taipei, Taiwan



### Professional Experience

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- 2018-present: Leader of NVIDIA AI Technology Center – Taiwan (NVAITC-TW)
- 2018-present: Senior Solution Architect of NVAITC and World-Wide Field Operations (WWFO) in NVIDIA
- 2016-2018: Principal Engineer of Yield Excellence Program in Taiwan Semiconductor Manufacturing Company (TSMC)
- 2013-2016: Assistant Professor of Graduate Institute of Medical Mechatronics in Chang Gung University (Class: Linear Algebra, Electromagnetics)
- 2012-2013: Assistant Professor of Department of Electrical Engineering in Chang Gung University (Class: Linear Algebra)
- 2010-2011: Postdoc fellow under the supervision of Dr. C. C. Yang, working on the applications of Optical Coherence Tomography with gold nanorings for contrast agents.
- 2010 Visiting Instructor of NIDays 2010, National Instruments, Taiwan.
- 2009 Visiting Instructor of Labview 2009, National Instruments, Taiwan.

### Education

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- 2004-2010: Ph. D. National Taiwan University, Graduate Institute of Photonics and Optoelectronics, dissertation title: “Optical Coherence Tomography and Oral Disease Diagnosis Application”
- 2003-2004: M.S. National Taiwan University, Graduate Institute of Photonics and Optoelectronics, research topic: “Simulations of photon migration in 3D human brain model with Monte Carlo method.”
- 1998-2003: B.S. National Taiwan University, Department of Physics

## Honors and Awards

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### *Industry field:*

- Top 1 rank in the world of Interspeech 2019 ComParE Challenge
- Top 4 rank in the world of PREDICTIVE ANALYTICS COMPETITION (PAC 2019) for predicting brain age based on structural Magnetic Resonance Imaging
- Silver medal (20/468 Top 5%) in Inclusive Images Challenge (Google AI challenge) on Kaggle.com
- Co-work with three groups to win the 2<sup>nd</sup>, 3<sup>rd</sup> and special awards of Kaggle competition for defect-image classification in TSMC, 2017
- Silver award of innovation competition in TSMC, 2016 (*Project: “I becomes 500-A.I. troops help you hit the defects.”*)

### *Academic field:*

- Invited Talk in 2018 Conference on Technologies and Applications Artificial Intelligence (TAAI 2018) – “Special Session 1 – GPU technology: NVIDIA medical platform – Project CLARA”
- Session Chair of 2014 SPIE Photonic Europe Conference
- Outstanding Post-Doctor Researchers Conference Travel Grant, the Foundation for the Advancement of Outstanding Scholarship (FAOS), Taiwan, 2010
- NSC Conference Travel Grant, National Science Council, Taiwan, 2009
- Outstanding Students Conference Travel Grant, the Foundation for the Advancement of Outstanding Scholarship (FAOS), Taiwan, 2009

## Research Interests

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- Machine learning algorithm – deep learning, random forest, etc
- Techniques and clinical applications of Optical Coherence Tomography,
- Image analysis methods,
- Localized Surface Plasmon effects of nano-particles for biomedical applications
- Monte Carlo simulation for photon migration

## Grant from Ministry of Science and Technology, R.O.C.

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2015-2017 “Development of portable optical coherence tomography (II)”

2014-2015 “Development of portable optical coherence tomography”

2013-2014 “Development of optical coherence microscopy for real-time optical biopsy imaging”

2012-2013 “Development of optical coherence microscopy for application of real-time 3D cell image”