

Chung-Hao Huang
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EDUCATION

- **PhD in Graduate Institute of Electronics Engineering**
National Taiwan University
2008.Sep - 2016.Jun
- **Bachelor in Electronics Engineering**
National Taiwan University
2003.Sep - 2007.Jun

PUBLICATIONS

- Conference
 - [MEMOCODE 18] Towards Dependability Metrics for Neural Networks
 - [ATVA 18] Quantitative Projection Coverage for Testing ML-enabled Autonomous Systems
 - [VSTTE 18] Verification of Binarized Neural Networks via Inter-Neuron Factoring
 - [CAV 2014] G4LTL-ST: Automatic Generation of PLC Programs
 - [TACAS 2013] Model-Checking Iterated Games
 - [APLAS 2013] Temporal Specification Mining for Anomaly Analysis
 - [GandALF 2012] Rapid Recovery for Systems with Scarce Faults
 - [CONCUR 2011] A Temporal Logic for the Interaction of Strategies
 - [FASE 2011] Evolving a Test Oracle in Black-Box Testing
- Journal
 - [Acta Inf. 2017] Model-Checking Iterated Games
 - [IEEE Trans. SW 2016] A Game-Theoretic Foundation for the Maximum Software Resilience against Dense Errors
 - [ACM Toplas 2015] An Extension of ATL with Strategy Interaction

WORK EXPERIENCE

2017.Nov – now, fortiss GmbH, Scientist

- fortiss GmbH is a research institute focusing on bridging industrial company and academical research. I am participating/leading following projects in fortiss.
 - Build an NN-based perception component for adaptive cruise control (ACC) and design a testing framework for the component to meet the

requirement of ISO 15622 and ISO 26262

- Build a bounded model checking tool chain for EVM smart contracts
- Build a service broker and fleet management system to control UAVs

2015.Mar – 2017.Jul, ChaseWind Co. Ltd, Co-founder & CTO

- ChaseWind is a startup company which is building HUD smart glasses and corresponding cloud service for cyclist
 - Product Intro: https://youtu.be/1CR_QuYoKE
 - LinkedIn: <https://www.linkedin.com/company-beta/11061863/>
 - Crunchbase: <https://www.crunchbase.com/organization/chasewind>
- Defined the RESTful API of the server and the SW spec of the Android APP on the phone and glasses and implemented the Android APP
- Intellectual property and financial plan
- Recognitions during in ChaseWind:
 - 2017 Plug and Play, Sunnyvale - International program
 - 2017 MWC, Barcelona - Exhibitor
 - 2016 Bluetooth SIG Breakthrough Awards - Finalist
 - 2016 From Innovation to Innovation(FITI) - Champion, \$90K
 - 2015 Mobile Heroes Communication - Champion, \$10k

2016.Mar – 2016.Sep, Jorjin Technologies Inc., SW Engineer

- Survey the application requirements of AR glasses from different verticals such as medical, fire fighters, security guards, pipeline workers, etc.
- Once the SW spec had been finalized, implement demo APPs to demonstrate the capability of HW platform

2014.Feb – 2016.Feb, Intel PC BIOS team, Intern

- Implement tools in the BIOS building tool chain and integrate the tool into CI system to improve the quality of code. Most of the tools are parser-based python script which can fix the code formatting, verify memory alignment, check binary compatible between versions.
- Maintain BIOS code, debug issues and implement POC of new features

2011.Jun – 2012.Jun, Intel Innovation center(embedded), Intern

- Review the IP in the production code
- Maintain the server of remote testing platform
- Design automatic test cases for digital signage or POS printing system

TECHNICAL SKILLS

- Test case generation framework for autonomous driving
- Prototyping with Tensorflow and Pytorch
- Adversarial attack of neural network with CleverHans
- X86 architecture and UEFI bios basic concept
- Experience in parser generator (lex, yacc, ply, ANTLR, pyparsing)
- Android APP
- LAMP or Django backend server
- Experience in NP-complete, PSPACE-complete, EXPTIME-complete algorithm implementation with C, C++ or python

WORKING PERMIT

- EU Blue Card