## Hsuan Ya (Michael) Tsai

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## WORK EXPERIENCE

MICROSOFT Sep. 2021-Present Senior Software Engineer Redmond, US

- Azure Core Compute Host Networking
  - o Building, testing and deploying networking acceleration on Azure public cloud

MICROSOFT Apr. 2019-Aug. 2021 Redmond, US

Software Engineer II Azure Networking - Host Networking

- Building, testing and deploying networking acceleration on Azure public cloud
  - Enabled Accelerated Networking for new Hardware SKU/VM SKU
    - Developed Mellanox NIC Qualifying Framework [python/powershell]
    - Developed Network Management Agent/NIC Agent for networking module servicing workflow [C++]
    - Orchestrated cluster validation/cluster-wise mitigation/health check

MICROSOFT Nov. 2017-Apr. 2019 Shanghai, China Software Engineer II

- Designed and Developed Protocol Test Suites [C#]
  - Validated and aligned interoperability behaviors for new Windows releases or updates
  - Enhanced test tools and scripts [C#/Powershell]
- Utilized Continuous Integration [Jenkins]
  - o Strengthened Jenkins by introducing Jenkins Pipeline/jenkinsfile
- Performed Document Review and Overview Document Testing for Open Specification in MSDN

DELL INC. Aug. 2017-Oct. 2017 Sr. Software Engineer Taipei, Taiwan

Designed and developed software solutions in Alienware gaming PCs [C/C++/C#]

TREND MICRO INC. Jan. 2015-Aug. 2017 Taipei, Taiwan

Project Lead/Sr. Software Engineer

- Led a team of 5 people to manage and operate a network engine team to discover Advanced Threats and Target Attacks [C][Linux]
  - Drove Deep Packet Inspection for OSI layer 2/3/4 protocols (TCP/UDP/ICMP/IP/HTTP/etc.)
  - Designed networking-related features
    - Customized IP, FQDN and URL rules for blacklist/whitelist
    - Packet filter to filter out packets with specified IP-port pair requested by NEC Technologies
    - Packet Capture to assist and support network forensic
  - Developed DSL operators for real-time threat detection operation team [lex/yacc]
  - Designed and improved test tools and build/UT scripts [C/Python/Perl/gtest/C++]

TREND MICRO INC. Apr. 2012-Jan. 2015 Taipei, Taiwan **Software Engineer** 

## EDUCATIONAL BACKGROUND

UNIVERSITY OF SOUTHERN CALIFORNIA Sep 2010-Dec 2011 **Master of Science in Computer Science (General)** Los Angeles, CA

Attended in Non-thesis program.

NATIONAL CHIAO TUNG UNIVERSITY Sep 2007-Jul 2009 **Master of Science in Computer Science** Hsinchu, Taiwan Thesis topic: The Design of a P2P Live and Time-Shift Streaming System

NATIONAL CHIAO TUNG UNIVERSITY Sep 2002-Jun 2007 **Bachelor of Science in Computer Science** Hsinchu, Taiwan

GPA 3.70 (26/207)