Hsuan Ya (Michael) Tsai

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WORK EXPERIENCE

MICROSOFT	*Apr. 2019-Present*
Software Engineer II	*Redmond, US*

- Azure Networking - Host Networking
  - Building, testing and deploying networking acceleration on Azure public cloud
    - Designed and developed Mellanox NIC Qualifying Framework *[python/powershell]*
    - Performed functional, performance and servicing testing for Mellanox NIC
    - Designed and developed Network Management Agent/NIC Agent for networking module servicing workflow *[C++]*

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

- Designed and Developed Protocol Test Suites *[C#]*
  - Validated and aligned interoperability behaviors for new Windows releases or updates
    - Top contributor in Protocol Test Suites GitHub repository
      - https://github.com/Microsoft/WindowsProtocolTestSuites/graphs/contributors
  - Improved test tools and build/test/automation scripts *[C#/Powershell]*
- Utilized Continuous Integration *[Jenkins]*
  - Upgraded Jenkins from HTTP to HTTPS, on-premises to Azure
  - Strengthened Jenkins by introducing Jenkins Pipeline/jenkinsfile
- Performed Document Review and Overview Document Testing for Open Specification in MSDN
- Represented Microsoft in Interop Dev Events

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*
Project Lead/Sr. Software Engineer	*Taipei, Taiwan*

- 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
  - Designed and developed DSL operators for real-time threat detection operation team *[lex/yacc]*
  - Designed and improved test tools and build/UT script *[C/Python/Perl]*
  - Automated Unit tests for all exported APIs and end-to-end scenarios *[gtest/C++]*

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

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)