

# CURRICULUM VITAE

Wu-chang Feng    September 14, 2018

## Education

Ph.D. 1999 Computer Science and Engineering, University of Michigan, Ann Arbor  
MSE 1994 Computer Science and Engineering, University of Michigan, Ann Arbor  
BS 1992 Computer Engineering, Pennsylvania State University (with honors)

## Employment

Professor, Department of Computer Science, Portland State University, Portland OR, 2012–present.

Associate Professor, Department of Computer Science, Portland State University, Portland OR, 2006–2012.

Assistant Professor, Department of Computer Science, Portland State University, Portland OR, 2004–2006.

Assistant Professor, Department of Computer Science Engineering, Oregon Health and Science University, Beaverton OR, 2001–2004.

Senior Architect, Proxinet, Inc. and Pumatech Inc., Emeryville CA, 1999–2001.

Research Staff IBM T.J. Watson Research Center, Hawthorne NY, 1996, 1997, 1998, 1999.

Research Assistant, University of Michigan, Ann Arbor MI, 1994–1999.

Teaching Assistant, University of Michigan, Ann Arbor MI, 1992–1994.

## Dissertation

Improving Internet Congestion Control and Queue Management Algorithms, May 1999.  
Advisor: Kang Shin, University of Michigan.

## Honors, Grants and Fellowships

### Honors

Best Student Paper Award (Chris Chambers), Internet Measurement Conference 2005.

IEEE Communications Society 2003 William R. Bennett Prize for Best Paper in IEEE/ACM Transactions on Networking.

Best IBM Research Paper Award in Computer Science, Electrical Engineering, and Math 2002.

### Grants

Wu-chang Feng (PI), “SaTC: EDU: Curricula and CTF Exercises for Teaching Smart Fuzzing and Symbolic Execution”, NSF 1821841, **\$279,448** (09/2018–09/2020).

Wu-chang Feng (Co-PI), “GenCyber Narrative: Portland State University Combo Camp”, NSA GenCyber 206855 **\$100,000**, (07/2017).

Wu-chang Feng (PI), “EDU: A Capture-the-Flag Service for Computer Security Courses”, NSF 1623400, **\$299,795** (09/2016–09/2018).

Wu-chang Feng (Co-PI), “CyberPDX 2016: A Student-Teacher Combination Camp for Integrated Learning and High School Course Development ”, NSA GenCyber **\$100,000**, (07/2016).

Wu-chang Feng (PI), “Increasing the Cost of Malware”, NSF CNS 1017034 (22% funding rate), **\$498,440** (09/2010–09/2013).

Wu-chang Feng (PI), “Detecting Cheating in On-line Games via Remote Measurement”, Intel Research Council, **\$186,000** (4/2007–4/2009)

Tom Shrimpton, Wu-chang Feng (co-PI), “Making Network Layer Proofs-of-Work Work”, NSF CNS 0627752 (12% funding rate), **\$399,711** (10/2006–10/2009).

Wu-chang Feng (PI), Wu-chi Feng, David Maier, Jonathan Walpole, “Forensix: Large-scale Tamper-resistant Computer Forensic Systems” NSF ANI-0230960 Strategic Technologies for the Internet (8% funding rate), **\$749,810** (11/2002–9/2006). REU supplement **\$12,500** (5/2003)

Wu-chang Feng (PI), “Infrastructure for On-line Game Services” IBM Faculty Partnership Award, **\$80,000** (5/2003–5/2006)

Wu-chang Feng (PI), “Efficient Intrusion Detection and Response Systems”, Oregon University System ETIC, **\$121,151** (7/2002–12/2003).

Wu-chang Feng (PI), “Efficient Intrusion Detection and Response Systems”, Intel Research Council, **\$246,000** (11/2001–11/2004)

Wu-chang Feng (PI), “An IXP Laboratory for the OGI School of Science and Engineering at OHSU”, Intel IXA Curriculum Grant, **\$19,000** (1/2002–12/2002).

Nirupama Bulusu, Wu-chi Feng, Wu-chang Feng (Co-PI), “Infrastructure to Support Heterogeneous and Dynamic Sensor Networking Research”, NSF CNS Research Resources (33% funding rate), **\$110,000** (8/2004–8/2007)

David Maier, Wu-chang Feng (Co-PI), David Hansen, “Undergraduate Research Institute”, Oregon Intel-OUS Engineering and Computer Science, **\$38,937** (4/2004–8/2004)

Wu-chi Feng, Jonathan Walpole, Wu-chang Feng (Co-PI), “A Flexible Video Networking Infrastructure to Support Massively Scalable Information Flows”, NSF EIA Research Resources, **\$139,980** (10/2001–9/2004)

Lois Delcambre, David Maier, Wu-chang Feng (Co-PI), “Stream Queries for Network Monitoring”, ARDA, **\$43,988** (6/2002–9/2002).

Wu-chang Feng (PI), Intel Xscale Technology Equipment Grant, **\$57,680** (5/2004)

Wu-chang Feng (PI), Intel PlanetLab, **\$9,429** (8/2003)

Wu-chang Feng (PI), Intel Netstructure, **\$119,970** (8/2002)

Wu-chang Feng (PI), Intel IXA Curriculum, **\$17,520** (1/2002–12/2002)

### **Fellowships**

IBM Research Fellowship (1997–1999)

### **Other**

Student Marshal for Computer Engineering at Penn State University (1992)

Evan Pugh Senior Award, Penn State University (1992)

Evan Pugh Junior Award, Penn State University (1991)

President’s Freshman Award, Penn State University (1989)

Golden Key National Honor Society (1990-1992)

### **Refereed Publications or Other Creative Achievements**

**Other** See <https://thefengs.com/wuchang/publications.html>

### **Presentations at Professional Meetings**

#### **Invited Presentations**

Wu-chang Feng, “Learning Symbolic Execution using an Angr-y CTF”, BSidesPDX, Portland, Oregon, October 2017.

Wu-chang Feng, “kaPoW Webmail: Effective Disincentives Against Spam”, Lewis and Clark College, Portland, Oregon, April 2012.

Wu-chang Feng, “kaPoW Webmail: Effective Disincentives Against Spam”, Yahoo! Research, San Jose, California, May 2011.

Wu-chang Feng, “kaPoW Webmail: Effective Disincentives Against Spam”, Google Labs Talk, Mountain View, California, April 2011.

Wu-chang Feng, “Fides: Remote Anomaly-Based Cheat Detection for On-line Games”, Galois colloquium, Portland, Oregon, October 2010.

Wu-chang Feng, “Securing On-line Games On-line”, NSF Workshop on Future Research in Computer Games and Virtual Worlds, Irvine, California, September 2010.

Wu-chang Feng, “kaPoW! Protecting the Web with Transparent Proof-of-Work”, Intel Corporate Technology Group Colloquium, Hillsboro, Oregon, March 2008.

Wu-chang Feng, “What’s Next in Networked Games?”, NetGames 2007 keynote talk, Melbourne, Australia, November 2007.

Seoul National University “The Design and Implementation of Network Puzzles”, Seoul, South Korea, September 2006.

Supercomputing 2005 MasterWorks, “Got MIPS? The Need for Speed in On-line Games” Seattle, Washington, November 2005.

IBM Research talk, “The Forensix “Computer TiVo””, Hawthorne, New York, October 2005.

NSF PI Meeting, “The Forensix “Computer TiVo””, Irvine, California, September 2005.

NSF PI Meeting, “PuzzleNet: Network Layer Client Puzzles”, Irvine, California, September 2005.

University of British Columbia colloquium, “The Design and Implementation of Network Puzzles”, October 2004.

IBM Research colloquium, “The Design and Implementation of Network Puzzles”, Hawthorne, NY, April 2004.

University of Oregon colloquium, “The Design and Implementation of Network Puzzles”, March 2004.

Cisco virtual colloquium series, “The Design and Implementation of Network Puzzles”, March 2004.

University of Bordeaux (ENSEIRB), “The Design and Implementation of Network Puzzles”, Bordeaux, France, February 2004.

Intel colloquium series, “The Case for TCP/IP Puzzles”, Hillsboro, Oregon, October 2003.

Intel IXA Workshop, “Hashes, Caches, and other projects at OGI/OHSU”, Santa Clara, CA, September 2003.

NetGames 2003 panel, “Multiplayer Games: What is the Research Agenda”, Redwood City, CA, May 2003.

University of Bordeaux (ENSEIRB), “On-line Games and Routers”, Bordeaux, France, November 2002.

Pacific Northwest National Laboratory, “Project report: Stream Queries for Network Monitoring”, Richland, WA, July 2002.

Intel IXA Workshop, “An IXP-based networking practicum course”, Hillsboro, OR, May 2002.

### **Other Research and Other Creative Achievements**

MetaCTF source-code, <http://bitbucket.org/wuchangfeng/metactf>

kaPoW source-code, <http://kapow.cs.pdx.edu>

Fides source-code

Forensix source-code release, <http://forensix.sourceforge.net>

PCCS source-code release <http://pccs.sourceforge.net>

TCPivo source-code release <http://www.thefengs.com/wuchang/work/tcpivo/>

### **Governance and Other Professionally-Related Service**

#### **Governance Activities for the University, College, Department**

Chair, Annual evaluation for Feng Liu

Member, PSU Faculty Senator, 2010, 2011.

Member, Graduate petition committee, 2009–present.

Member, PSU MCECS curriculum committee, 2009–2011.

Member, PSU Faculty Grievance Committee, 2005–2006.

Member, Graduate Committee, 2004–2008.