

Behnaz Arzani

CONTACT INFORMATION	8397 158th Ave NE, Redmond, WA. Zip. 98054	<i>Cell-phone:</i> (+1)215-821-5094 <i>email:</i> bearzani@microsoft.com
WEBSITE	https://www.microsoft.com/en-us/research/people/bearzani/	
CURRENT POSITION	Microsoft Research <ul style="list-style-type: none">⊙ Post Doctoral Researcher	August 2017
EDUCATION	University of Pennsylvania Philadelphia, PA <ul style="list-style-type: none">⊙ PhD candidate Computer Science<ul style="list-style-type: none">▷ GPA: 3.94/4.00⊙ PhD candidate Electrical and Systems Engineering<ul style="list-style-type: none">▷ GPA: 3.86/4.00 University of Pennsylvania Philadelphia, PA <ul style="list-style-type: none">⊙ Dual Masters degree from Electrical Engineering and Computer Science<ul style="list-style-type: none">▷ GPA: 3.86/4.00 Sharif University of Technology , Tehran, Iran <ul style="list-style-type: none">⊙ B.S., Electrical Engineering, Communications	May 2014 to August 2017 Jan 2010 to May 2014 August 2017 Sep 2006 to Jun 2010
RESEARCH INTERESTS	Network Protocols, Network QOS-QOE Improvement, Network Diagnosis, Applications of Machine Learning in Networking, Development of Networking Simulation Interests and Emulation Software, and Software Defined Networking, Datacenter Security	
PROJECTS	<i>Failure diagnosis for data center networks</i> Working with Dr. Selim Ciraci, Dr. Jitu Padhye, Dr. Yibo Zhu, Dr. Hongqiang Liu, Dr. Geoff Outhred, Dr. Assaf Schuster, and Dr. Boon Thau Loo. <i>Improving Cost and Performance in a CDN video delivery ecosystem</i> Working with Prof. R. Guerin and Dr. B. T. Loo. <i>Deconstructing MTPCP performance</i> Working with Prof. R. Guerin, Dr. B.T. Loo, and Dr. A. Gurnery <i>FixRoute: Automated Router Configuration Repair with Traffic Engineering Optimizations</i> Working with Prof. R. Guerin, Dr. B.T. Loo, and Dr. A. Gurnery <i>SDN Shadow</i> Working with Dr. Hui Zhang <i>Distributed Robust Routing in Wireless Mesh Networks</i> Working with Prof. R. Guerin and Dr. A. Rebeiro. <i>Simulation, design and implementation of block codes in wireless optical networks</i> , Bachelor Thesis under the supervision of Prof. J. Salehi.	
SELECT GRADUATE COURSES	Digital Communications, Networking Theory and Fundamentals, Advanced Programing, Introduction to Algorithms, Advanced Algorithms, Convex Optimization, Optimal Design of Wireless Networks, Game Theory (Audited), Graduate level Probability, Advanced Networking Protocols(Audited), Embeded Systems, Network and Infrastructure Threats: Attacks, Defenses, and Incentives, Machine Learning, Academic Writing, Software Systems, Mathematical Statistics, Beyond MapReduce	

PUBLICATIONS

- ⊙ B. Arzani, S. Ciraci, L. Chamon, Y. Zhu, H. Liu, J. Padhye, B. Thau Loo, G. Outhred, 007: Democratically Finding The Cause of Packet Drops, NSDI 2018
- ⊙ B. Arzani, S. Ciraci, L. Chamon, Y. Zhu, H. Liu, J. Padhye, G. Outhred, B. Thau Loo, Closing the Network Diagnosis Gap with Vigil, Proceedings of SIGCOMM Posters and Demos 2017
- ⊙ B. Arzani, S. Ciraci, B. Thau Loo, A. Schuster, G. Outhred, Taking the Blame Game out of Data Centers Operations with NetPoirot, SigComm, Florianopolis, Brazil, 2016
- ⊙ A. Gurney, B. Arzani, B. Thau Loo, R. Guerin, FixRoute: Automated Router Configuration Repair with Traffic Engineering Optimizations, arxive 2015
- ⊙ B. Arzani, A. Gurney, S. Cheng, R. Guerin, B. Thau Loo, Deconstructing MPTCP Performance, ICNP, North Carolina, 2014
- ⊙ H. Zhang, B. Arzani, F. Ivancic, J. Rhee, N. Arora, G. Jiang, OFFLINE QUERIES IN SOFTWARE DEFINED NETWORKS, US Patent, 2014
- ⊙ B. Arzani, A. Gurney, S. Cheng, R. Guerin, B. Thau Loo, Impact of Path Selection and Scheduling Policies on MPTCP Performance, PAMS, Victoria, CA, 2013
- ⊙ B. Arzani, R. Guerin, A. Rebeiro, A Distributed Routing Protocol for Predictable Rates in Wireless Mesh Networks, ICNP, Austin, Tx, 2012
- ⊙ B. Arzani Design Of A Distributed Routing Protocol For Predictable Rates in Wireless Mesh Networks, ICNP PhD forum, Austin, Tx, 2012

PROFESSIONAL EXPERIENCE

Microsoft., Redmond, WA, USA *Intern* **Summer 2015, Summer 2016**

- ⊙ Automated classification of communication faults using TCP statistics.

NEC Labs., Princeton, NJ, USA *Intern* **Summer 2013**

- ⊙ SDNShadow, a debugging tool for Software Defined Networks.

Micromowje Engineering Co., Tehran, Iran
Intern **Summer 2009**

- ⊙ Producing high frequency satellite television transceivers and BTS stations

HONORS AND AWARDS

- ⊙ Ranked 57th among nearly 400000 participants in the Nationwide Universities Entrance Exam (Konkour) **Summer 2006**
- ⊙ Ranked 10th among nearly 400000 participants in the Nationwide English Universities Entrance Exam (Konkour) **Summer 2006**

ACADEMIC EXPERIENCE

Teaching Assistant

University of Pennsylvania

- ⊙ Introduction to Probability-Coursera (Instructor: Prof. Venkatesh) **Summer-Fall 2014**
- ⊙ Introduction to Probability (Instructor: Prof. Venkatesh) **Spring 2014**
- ⊙ Elements of Probability (Instructor: Prof. Venkatesh) **Fall 2013**
- ⊙ Networking Theory and Fundamentals(Instructor: Prof. Sarkar) **Spring 2012**

Sharif University of Technology

- ⊙ Principles of Electronics (Instructor: Prof. Fardmanesh)
 - ▷ Holding sections and Grader **Spring 2009**
- ⊙ Electronics Engineering Principles (Instructor: Prof. Fardmanesh)
 - ▷ Holding sections and Grader **Fall 2009**

Laboratory Instructor

- ⊙ Electrical Engineering Principles (Supervisor: Prof. Fardmanesh)
 - ▷ Lab Instructor **Fall 2008**
- ⊙ Electrical Engineering Principles (Supervisor: Prof. Kaboli)
 - ▷ Lab Instructor **Fall 2009**

Physics tutor at Salam Institution, Karaj, Iran **Summer 2008**

Other

- ⊙ Graduate Student Representative in Computer Science **Fall 2014, Spring 2015, Fall 2015**
- ⊙ Active member of Resana English Group, SUT
 - ▷ Coordinator of Free Discussion Sections
 - ▷ Active participants in the English Poetry group
- ⊙ Active member of the industrial correspondence group of the MCN national conference, SUT **Fall and Winter 2008**

MENTORING

- ⊙ Nick Iodice **Fall, Spring 2014**

SKILLS

Computer Skills:

- ⊙ *Programming Languages:* Python, R, Haskell, NS2/NS3, OPNET, C/C++, Ruby, MATLAB & Simulink, 8051/8085/80x86/AVR Assembly, VHDL, LINGO
- ⊙ *Applications:* OrCAD PSpice, CodeVision, L^AT_EX, AutoCAD, Microsoft Office, CVX
- ⊙ *Operating Systems:* Microsoft Windows 10/7/Vista/XP/2000, Linux Ubuntu/Fedora, Mac

Language Skills:

- ⊙ Farsi(Native)
- ⊙ English(Fluent) TOEFL(iBT): Reading: 30/ Listening: 30/ Speaking: 28/ Writing: 28