Arian Akhavan Niaki

College of Information and Computer Sciences   arianniaki@gmail.com
University of Massachusetts   arian@cs.umass.edu
Amherst - USA

Research Interests
- Computer Networks, Network Measurement, Internet Measurement

Education

University of Massachusetts Amherst,   Aug 2017-Present
MS/PhD student in Computer Science, GPA: (**3.9/4**)
Advisor: Dr. Phillipa Gill

Stony Brook University,   Sep 2016-Jul 2017
MS/PhD student in Computer Science (Transferred to UMass), GPA: (**3.9/4**)

Sharif University of Technology,   Sep 2011-Jun 2016
B.S. in Computer Engineering

Microsoft Certified IT Professional, Shatel Academy,   2014
Studied the course on Windows Server 2008 R2

Professional Experience

ThousandEyes (Cisco)   June-Sep 2020
- Internet Researcher Intern
- Supervised by Dr. Arash Molavi Kakhki
- Worked on analyzing and comparing CDN performance globally

University of Massachusetts Amherst   Aug 2017-Sep 2019
- Graduate Research Assistant
- Supervised by Dr. Phillipa Gill
- Worked on Internet and censorship measurement projects

International Computer Science Institute (ICSI)   May-Aug 2018
- Research Intern
- Supervised by Dr. Nicholas Weaver
- Worked on estimating IoT population using DNS caches

Stony Brook University   Jun 2017-Aug 2017
- Graduate Research Assistant
- Supervised by Dr. Phillipa Gill
- Worked on analyzing Internet censorship data

Institute for Studies in Theoretical Physics and Mathematics
- Undergraduate Research Assistant   Jun 2015-Jul 2016
- Supervised by Dr. Reza Entezari Maleki and Dr. Ali Movaghar
- Worked on Performance Modeling and Evaluation of Web Services Using High Level Extensions of Petri Nets

Pishtazan Andishe Pouya, Tehran, Iran   Jan-Jul 2016
- Software Engineering Intern
- Supervised by Seyed Mohammad Hosseini
- Produced, designed and analyzed models for software information systems and web applications.

VADA Future Communications, Tehran, Iran   Jan-Dec 2014
- Software Developer

Arian Akhavan Niaki

- Supervised by Omid Jafarinezhad
- Developed several Android mobile applications
- Designed, developed, and maintained Django/Semantic-UI web applications
- Designed, developed a web crawler with Scrapy Spider

Teaching Assistant,
- University of Massachusetts, Amherst

    – COMPSCI 453: Computer Networking   Spring 2021
        Instructor: Dr. Parviz Kermani
    – COMPSCI 660: Advanced Information Assurance
        Instructor: Dr. Amir Houmansadr   Fall 2020
    – COMPSCI 460: Intro to Computer and Network Security
        Instructor: Dr. Amir Houmansadr   Fall 2019

- Stony Brook University

    – CSE 305: Principles of Database Systems   Spring 2017
        Instructor: Dr. Scott Smolka
    – CSE 219: Computer Science III   Fall 2016
        Instructor: Dr. Ritwik Banerjee

- Sharif University of Technology

    – Numerical Methods   Spring 2016
        Instructor: Dr. Mohammad Gharib
    – Computer Networks   Spring 2015
        Instructor: Dr. Hossein Ajorlo
    – Computer Simulation   Spring 2015
        Instructor: Dr. Reza Entezari Maleki

Publications

Conference Papers
- Cache me Outside: A New Look at DNS Cache Probing
  <u>Arian Akhavan Niaki</u>, William Marczak, Sahand Farhoodi, Andrew McGregor, Phillipa Gill and Nicholas Weaver
  In Proceedings of the 22nd Passive and Active Measurement Conference (PAM 2021).   Mar. 2021
- Triplet Censors: Demystifying Great Firewalls DNS Censorship Behavior
  Anonymous, <u>Arian Akhavan Niaki</u>, Nguyen Phong Hoang, Phillipa Gill and Amir Houmansadr
  In Proceedings of the 10th USENIX Workshop on Free and Open Communications on the Internet. FOCI 20. USENIX. 2020.   Aug. 2020
- Assessing the Privacy Benefits of Domain Name Encryption
  Nguyen Phong Hoang,<u>Arian Akhavan Niaki</u>, Nikita Borisov, Phillipa Gill and Michalis Polychronakis
  In Proceedings of ACM ASIACCS 2020.   Jul. 2020
- The web is still small after more than a decade
  Nguyen Phong Hoang, <u>Arian Akhavan Niaki</u>, Michalis Polychronakis and Phillipa Gill
  In ACM SIGCOMM Computer Communication Review 2020.   Jun. 2020
- A Global, Longitudinal Internet Censorship Measurement Platform
  <u>Arian Akhavan Niaki</u>, Shinyoung Cho, Zachary Weinberg, Nguyen Phong Hoang, Abbas Razaghpanah, Nicolas Christin, and Phillipa Gill
  Proceedings of the 41st IEEE Symposium on Security and Privacy (Oakland). IEEE. 2020.   May. 2020

- A Large-Scale Analysis of Deployed Traffic Differentiation Practices
  Fangfan Li, <u>Arian Akhavan Niaki</u>, David Choffnes, Phillipa Gill, and Alan Mislove
  In Proceedings of ACM SIGCOMM 2019. Aug. 2019
- Studying TLS Usage in Android Apps
  Abbas Razaghpanah, <u>Arian Akhavan Niaki</u>, Narseo Vallina-Rodriguez, Srikanth Sundaresan, Johanna Amann, and Phillipa Gill
  Conference on emerging Networking EXperiments and Technologies (CoNEXT). Seoul/Incheon, South Korea. Dec. 2017
- liberate (n): A library for exposing (traffic-classification) rules and avoiding them efficiently
  Fangfan Li, Abbas Razaghpanah, Arash Molavi Kakhki, <u>Arian Akhavan Niaki</u>, David Choffnes, Phillipa Gill, and Alan Mislove
  Internet Measurement Conference (IMC). London, UK. Nov. 2017

Journal Papers
- Modeling and Evaluation of Service Composition in Commercial Multi-Clouds using Timed Colored Petri Nets
  R. Entezari-Maleki, S.E. Etesami, N. Ghorbani, <u>A.A. Niaki</u>, L. Sousa, and A. Movaghar,
  IEEE Transactions on Systems, Man, and Cybernetics: Systems (Volume: PP, Issue: 99) Nov. 2017

Skills
- Programming Languages: Python, Java, Matlab, C/C++(basic), Android Programming, SQL, Swift(basic), bro, Golang(basic)
- Web Development: HTML, CSS, JavaScript(JQuery), Python(Django)
- Operating Systems: Linux(Ubuntu), Windows, Macintosh, Windows Server
- Typesetting Tools: Microsoft Office, LaTeX, Google Docs
- Network Tools: Wireshark, Cisco Packet Tracer, Microsoft Exchange Server

Activities
- Iranian Graduate Student Association at UMass 2017-2018
  Vice president - Event Coordinator