Parsa **Pazhooheshy**

Computer Science PhD Student at University of Toronto

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"Thus we may have knowledge of the past but cannot control it; we may control the future but have no knowledge of it."
Claude Shannon

Education

University of Toronto — *NU lab, Toronto, Canada*

Direct PhD in Computer Science — *2020 - EXP:2025*

- Under Supervision of Prof. Y Ganjali
- Working on the Role of Machine Learning in Enhancing Current Networking Systems

Sharif University of Technology — *Tehran, Iran*

BSc in Electrical Engineering — *2015-2020*

- GPA: 18.12/20

Fields Of Interest

Computer Networks, Protocol Design,Measurement and Performance Analysis,Congestion Control, Computer Privacy and Security

ML for Networking , Enhancing congestion control protocols using ML, load balancing using time series prediction

Publications

- **Correlation-Aware Flow Consolidation for Load Balancing and Beyond**. WAIN 2021

  Shiva Ketabi, Matthew Buckley, **Parsa Pazhooheshy**, Faraz Farahvashy and Yashar Ganjali.

Previous Research Projects

Computer Networks and Systems group,Max Planck Institute for Software Systems — *Saarbrücken,Germany*

Research Intern Under Supervision of **Dr.Keon Jang** — *June. 2019 - Sept. 2019*

- Based on TCP protocol and focused on flow detection by modifying TCP protocol using NS2 source code for TCP
- Our goal is to develop an algorithm based on correlation between the sent packets and received packet for finding the number of competing flows respect to isolation of flows

Cloud-native Telecommunications Networks Lab — *Sharif University of Technology*

Research Student Under Supervision of **Prof.BH Khalaj** and Dr.A Ravanshid — *Dec. 2018 - June. 2019*

- Study on SDN, focused on RAN slicing
- Implement a Dynamic TDD Frame Reconfiguration. Our main objective is to form service-specific network slices based on traffic prediction and the inter-node interference

Cloud-native Telecommunications Networks Lab — *Sharif University of Technology*

Research Student Under Supervision of **Prof.BH Khalaj** and Dr.A Ravanshid — *Jun. 2018 - Dec. 2018*

- A full study on 3G, 4G and 5G systems,focused study on CU-DU splitting using OpenAirInterface Code
- We implemented F1 interface on the previous test-bed available in the Lab

Honors and Awards

- Fellowship as a visiting scholar from **Max Planck Institute for Software Systems.**
- Awarded scholarship from **Iran's National Elites Foundation since 2015.**
- Ranked **32**th in the Entrance Exam (Konkur) among more than 181000 candidate all over the country.

Course Projects

Intro. to ML *University of Toronto*

Prof. Marziyeh Ghassemi

- Song Genre Classification based on Song's lyrics using LSTM , BERT and NLP method like TF-IDF

Topics in Computational Social Science *University of Toronto*

Prof. Ashton Anderson

- Bitcoin Sentiment Analysis using Twitter Data

Information theory *Sharif University of Technology*

Dr.M Mirmohseni

- A research on Secrete key capacity
- Modeling Common randomness via Markov chain and finding computationally effective upper and lower bound for capacity

Data Networks *Sharif University of Technology*

Dr.MR Pakravan

- Developing a python based chat application ,with real world concepts like NAT and misbehaving TCP Receivers. Used different transport protocols like TCP CUBIC, TCP Reno, TCP Vegas.

Skills

Programming:Advanced	Python,Matlab,NS2,NS3
Programming:Intermediate	C,C++,Go,Verilog
Software	Mahimahi,Wireshark,Althium,Hspice,Pspice
Languages	English,Persian

Selected Graduate Courses

Introduction to Machine Learning, Prof. Marziyeh Ghassemi (UofT)	*A+*
Algorithms for Private Data Analysis, Prof. Aleksandar Nikolov (UofT)	*A+*
Algorithms for Collective Decision Making, Prof. Nisarg Shah (UofT)	*A+*
Data Networks, Dr.MR Pakravan (SUT)	*19/20*
Introduction to Quantum Algorithms, Prof. Nathan Wiebe (UofT)	*A+*
Topics in Computational Social Science, Prof. Ashton Anderson (UofT)	*A-*
Information Theory, Dr.M MirMoheseni (SUT)	*19.4/20*

Teaching Experience

2021,2022	**Office Hour TA**, Introduction to Computer Programming	*UofT*
2019	**HW Designer and Grader**, Data Networks	*SUT*
2019	**Matlab HW Designer and Grader**, Communication Systems	*SUT*
2018	**Matlab HW Designer and Grader**, Signals and Systems	*SUT*
2018	**Matlab Project Designer**, Signals and Systems Systems	*SUT*