

Farzad Salehisadaghiani

Toronto, ON, Canada

http://individual.utoronto.ca/farzad_salehi/
farzad.salehisadaghiani@mail.utoronto.ca

This resume is updated on December 7, 2016.

EDUCATION

- *Doctor of Philosophy*, Electrical Engineering Fall 2012-Present
University of Toronto, Toronto, Canada
Concentration: Systems Control
GPA: A
Thesis title: "Distributed Nash Equilibrium Seeking Algorithm".
- *Master of Applied Science*, Electrical Engineering 2010-2012
Concordia University, Montreal, Canada
Concentration: Systems Control
GPA: 4
Thesis title: "Error Analysis in Multi-Agent Control Systems".
- *Bachelor of Science*, Electrical Engineering 2006-2010
Amirkabir University of Technology, Tehran, Iran
First Major
GPA: 17.14 out of 20
- *Bachelor of Science*, Biomedical Engineering 2006-2010
Amirkabir University of Technology, Tehran, Iran
Second Major
GPA: 17.23 out of 20

RESEARCH INTEREST

- Game Theory, Nash Equilibrium Seeking Algorithms, Distributed Networked Games
- Multi-Agent Systems, Consensus Control
- Distributed Algorithms, Gossip-Based Algorithms, Consensus-based Distributed Optimization

PUBLICATIONS

- **Farzad Salehisadaghiani**, and Laca Pavel, "Nash Equilibrium Seeking with Non-doubly Stochastic Communication Weight Matrix," will be submitted to 7th EAI International Conference on Game Theory for Networks, 2017.
- **Farzad Salehisadaghiani**, and Laca Pavel, "Distributed Nash Equilibrium Seeking via the Alternating Direction Method of Multipliers," submitted to IFAC 2017 World Congress, Toulouse, France.
- **Farzad Salehisadaghiani**, and Laca Pavel, "A Distributed Nash Equilibrium Seeking Algorithm in Networked Graphical Games," submitted to Automatica Journal, 2016.
- **Farzad Salehisadaghiani**, and Laca Pavel, "Distributed Nash Equilibrium Seeking By Gossip in Games on Graphs," in Proceedings of 2016 IEEE Conference on Decision and Control, Las Vegas, NV, USA, to appear.
- **Farzad Salehisadaghiani**, and Laca Pavel, "Distributed Nash Equilibrium Seeking: A Gossip-Based Algorithm," in Automatica 72, 209-216, 2016.
- **Farzad Salehisadaghiani**, and Laca Pavel, "Nash Equilibrium Seeking By a Gossip-Based Algorithm," in Proceedings of 2014 IEEE Conference on Decision and Control, Los Angeles, CA, USA.

- **Farzad Salehisadaghiani** "Error Analysis in Multi-Agent Control Systems," M.A.Sc. thesis in ECE department at Concordia University, Montreal, QC, 2012.
- **Farzad Salehisadaghiani**, M. Asadi and A. G. Aghdam, "Formation Control of a Team of Single-integrator Agents with Measurement Error," in Proceedings of 2013 American Control Conference, Washington, USA.
- **Farzad Salehisadaghiani**, A. Ajorlou, and A. G. Aghdam, "Distributed Connectivity Preservation of a Team of Single Integrator Agents Subject to Measurement Error," in Proceedings of 2011 IEEE Multi Conference on Systems and Control, Denver, CO 80202, USA.

PRESENTATIONS

- "Distributed Nash Equilibrium Seeking By Gossip in Games on Graphs," will be presented at 55th IEEE Conference on Decision and Control, Las Vegas, NV, USA, December 12-14, 2016.
- "Distributed Nash Equilibrium Seeking in Networked Games," presented at 7th Biannual Meeting on System and Control Theory, Queen's University, Kingston, ON, May 11-13, 2016.
- "Nash Equilibrium Seeking By a Gossip-Based Algorithm," presented at 53rd IEEE Conference on Decision and Control, Los Angeles, CA, December 15-17, 2014.
- "Formation Control of a Team of Single-integrator Agents with Measurement Error," presented at American Control Conference, Washington, June 17-19, 2013.

AWARDS & CERTIFICATES

- \$15,000 University of Toronto *Doctoral Completion Award*. 2016-2017
A very competitive award which is only given to 6 ECE students.
- \$780 University of Toronto *SGS Conference Grant*. 2014
- *Edward S. Rogers Sr. Graduate Scholarship*, University of Toronto. 2012-2016
- \$1000 Concordia University *Graduation Bonus Award*. 2012
- \$23,000 Concordia University *Graduate Bursary*. 2010-2012
- \$10,000 Concordia University *Merit Scholarship*. 2011 2012
- \$4000 Concordia University *Partial Tuition Fee Remission Award*. 2010-2011
- Achieved *Top Rank Student Certificate* with great distinction from Amirkabir University of Technology. 2010
- Ranked 300th among more than 500,000 participants of Iranian nation-wide university entrance exam. 2006
- *Semi-finalist* of Iran Mathematics & Computer Olympiads, for two consecutive years. 2004-2005

TEACHING EXPERIENCE

Teaching Assistant of ECE 311, ECE 356, ECE 410 and ECE 557 Fall 2012 - Winter 2016
University of Toronto, Toronto, Canada

- Conducted lectures and tutorials for ECE under graduate/graduate students.
- Assisted students to model control systems for the analysis.
- Helped students to perform simulations and to program chips for the real-time control experiments using MATLAB, Simulink, Arduino, Quarc.

- Troubleshoot the control experimental equipments and resolved the problems in the Lab.
- Marked reports, mid-term and final exams and provided students with useful descriptive feedback.

COMPUTER SKILLS

Languages & Softwares: MATLAB, Simulink, PSpice, HSpice, C++, Python, Verilog, Protel 99 SE, Advance Design System (ADS), HDL, Microsoft Excel.

LANGUAGE SKILLS

- Fluent in *English*
- Intermediate in *French*

WORK & VOLUNTEER EXPERIENCE

Supervisor of Electrical Works 2006-2010
 Part-time job at Dalbandan Company Tehran, Iran

- Installing and Troubleshooting Electrical Equipment.
- Using P-spice to simulate the electrical Devices.
- Implementation and Monitoring Electrical Maintenance Program.
- Using Advance Excel to manage the working hour.

Volunteer of Academic Conferences & Social Events

- 25th Annual **Canadian Conference on Electrical and Computer Engineering** (April 29 - May 2, 2012, Montreal, Canada).
- The 2012 **American Control Conference** (June 27-29, 2012, Montreal, Canada).
 - ✗ Title: Head Volunteer
 - ✗ Managed and organized various talks depending on the different schedules and the different topics.
 - ✗ Scheduled various presentation sessions.
- 5th Biennial **Tirgan Festival**, the biggest persian cultural event (August 20-23, 2015, Toronto, Canada).

LEADERSHIP

Leader of a team project on "A Car Suspension System Control". Fall 2007
 Amirkabir University of Technology, Tehran, Iran.

WORK STATUS

Permanent Resident of Canada.

REFERENCES

Available upon request