Marshall Asch

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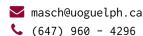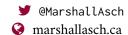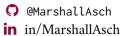📞 (647) 960 - 4296   🌐 marshallasch.ca   in in/MarshallAsch

I am currently a Masters Student and Teaching Assistant at the University of Guelph studying Mobile ad hoc Networks. I have a passion for command-line tools, networking and anything that runs on a *nix server. Most of my work has been on lower level cli tools and backend systems, but I do venture out into user land with web pages and full stack mobile apps.

Education

2019 – present   🔖 **M.Sc. Computer Science, University of Guelph, Canada** in Mesh Networking.

2015 – 2019   🔖 **B.Comp. (Hons) Computer Science, University of Guelph, Canada.**
Degree with Distinction Recognition for Outstanding Academic Performance.

Open Source Projects

2020 - Present   🔖 **liquidctl maintainer** 🄯 Active Maintainer on the python liquid cooler controller CLI application

Employment History

09/2020 – Present   🔖 **Graduate Teaching Assistant (Cloud Computing)**, University of Guelph, ON.

01/2020 – 04/2020   🔖 **Graduate Teaching Assistant (Operating Systems)**, University of Guelph, ON.

09/2019 – 08/2020   🔖 **Left Mitacs Accelerate Intern**, University of Guelph, ON.

09/2019 – 12/2019   🔖 **Graduate Teaching Assistant (Microcomputers)**, University of Guelph, ON.

05/2019 – 08/2019   🔖 **University of Guelph Mitacs Accelerate Intern**, Left, Maple Ridge, BC.

01/2019 – 04/2019   🔖 **Lead Developer and Undergraduate Research Assistant**, Working on the eNuk project, University of Guelph, ON.

🔖 **Undergraduate Teaching Assistant (Introduction to Computer Applications)**, University of Guelph, ON.

05/2018 – 08/2018   🔖 **Mobile App Developer**, Left, Maple Ridge, BC.

05/2017 – 08/2017   🔖 **IT Student**, Lakeridge Health, Oshawa, ON.

06/2016 – 08/2016   🔖 **High Ropes Instructor**, Camp New Moon, ON

06/2015 – 08/2015   🔖 **High Ropes Instructor**, Camp New Moon, ON

06/2014 – 08/2014   🔖 **High Ropes Instructor**, Camp New Moon, ON

Volunteer and Extra-Curricular Experience

Volunteering

10/2019   🔖 **Ontario University Fair**, Represented the University of Guelph, Toronto,ON.

09/2019 – 04/2020   🔖 **Guelph Coding Community**, Student club executive, Guelph, ON.

09/2019 – 12/2019   🔖 **Climbing Gym Monitor**, University of Guelph, ON.

12/2019   🔖 **Major League Hacking, Local Hack Day event Organizer**, Society of Computing and Information Science, Guelph, ON.

12/2018	**Major League Hacking, Local Hack Day event Organizer**, Society of Computing and Information Science, Guelph, ON.
09/2018 – 04/2020	**Society of Computing and Information Science, System Administrator**, University of Guelph, ON.
04/2017 – 06/2018	**Full Stack Developer**, ActivNtel, Guelph, ON.
01/2016 – 02/2017	**Climbing Gym Monitor**, University of Guelph, ON.
09/2016 – 06/2017	**Web Developer**, NGTronix, Guelph, ON.

Committees

09/2019 – present	**IT Strategy Advisory Committee**. University of Guelph, ON.
01/2018 – 04/2019	**Roboticon Planning Committee** Society of Computing and Information Science, Guelph, ON.
09/2017 – 04/2019	**Computer Infrastructure Committee** School of Computer Science, University of Guelph, ON.
09/2018 – 04/2019	**Curriculum Committee** School of Computer Science, University of Guelph, ON.

Awards and Recognitions

09/2020	**University of Guelph GSA Conference Runner up**, ($30) Awarded to the two runner up presenters for the student run conference.
04/2020	**Erin Angus Graduate Student Award**. Awarded to a graduate student for making significant contributions to student life by Graduate Student Association.
	CEPS Dean's Tri-Council Scholarship, ($5000) Deans Scholarship awarded to NSERC award holders, University of Guelph, ON.
	Canada Graduate Scholarships-Master's Program, ($17500) Natural Sciences and Engineering Research Council of Canada (NSERC) Scholarship, University of Guelph, ON.
02/2020	**Ontario Graduate Scholarship**, ($5000) A merit based academic scholarship, University of Guelph, ON.
05/2019	**College of Engineering and Physical Sciences Society of Excellence**, Demonstrated academic excellence and outstanding contributions to the university community, University of Guelph, ON.
	College of Engineering and Physical Science Deans Honours List, University of Guelph, ON. F15, W16, F16, W17, F17, W18, F18, W19
10/2018	**Dr. James Linders Scholarship**. ($500) Awarded for achieving the highest third year average by the School of Computer Science, University of Guelph, ON.
09/2015	**University of Guelph Entrance Scholarship**. ($2000) Awarded for being admitted with an average greater then 85% by the University of Guelph, ON.

Research Grants

04/2020	**Northern Scientific Training Program**. ($2150) Awarded to conduct fieldwork in Northern Canada by Polar Knowledge Canada.
04/2019	**Northern Scientific Training Program**. ($2307) Awarded to conduct fieldwork in Northern Canada by Polar Knowledge Canada.

Non Academic Presentations

09/2020	**Introduction to Git**, Guelph Coding Community, Guelph, ON.

Non Academic Presentations (continued)

03/2020	◪	**MSc. Seminar - Incorporation of Human Mobility in Data Replication Schemes in Mobile Ad Hoc Networks**, Guelph Coding Community, Guelph, ON.
09/2019	◪	**Advanced Git**, Guelph Coding Community, Guelph, ON.
	◪	**Introduction to BASH and Git**, Guelph Coding Community, Guelph, ON.
04/2019	◪	**Bridging the Digital Divide with Mobile Ad Hoc Networks in the Circumpolar North**, Guelph Coding Community, Guelph, ON.
12/2018	◪	**Major League Hacking Localhost Workshop**, Society of Computing and Information Science, Guelph, ON.
11/2018	◪	**Mesh Networking**, Guelph Coding Community, Guelph, ON.

Research Publications

Conference Proceedings

1 **Asch**, **M.**, Seymour, P. F., Ernst, J. & Gillis, D. (2019). Incorporation of Node Mobility in Data Replication Schemes in Mobile Ad Hoc Networks. In *2019 IEEE 10th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)* (pp. 0230–0236). Oral presentation and Preceding. doi:`10.1109/IEMCON.2019.8936268`

2 Durish, N., Gillis, D., Seymour, P. F., Rourke, K., **Asch**, **M.**, Raturi, S., ... Ernst, J. (2019). Bridging the digital divide in the circumpolar north [abstract]. In *Labrador research forum*, Happy Valley-Goose Bay, Labrador, Canada.

3 Gillis, D., Durish, N., Rourke, K., **Asch**, **M.**, Knarr, J., Samuels, J., ... Harper, S. L. (2019). Supporting community-based monitoring with technology in the circumpolar north [abstract]. In *Labrador research forum*, Happy Valley-Goose Bay, Labrador, Canada.

4 Durish, N., Gillis, D., Seymour, P. F., Rourke, K., **Asch**, **M.**, Raturi, S., ... Ernst, J. (2018). Bridging the digital divide to support community-based monitoring in the circumpolar north [abstract]. In *Arcticnet*, Ottawa, Ontario, Canada.

Conference Presentations

1 **Asch**, **M.**, Lin, X. & Gillis, D. (2020). Impact of social interactions on mobile ad hoc networks. Graduate Students Association Virtual Conference, Guelph, Canada.

2 **Asch**, **M.**, Rourke, K., Seymour, P. F., Durish, N., Flowers, C., Wood, M., ... Ernst, J. (2019). Bridging the digital divide with mobile ad hoc networks in the circumpolar north. Western Student Research Conference, London, Canada.

Skills

Languages	◪	Strong reading, writing and speaking competencies for English, LaTeX
Coding	◪	Java, SQL, Git, BASH, LaTeX, C, Node.js, Python
Databases	◪	MySQL, PostgreSQL, Mongodb.
Web Dev	◪	HTML, JavaScript, Apache Web Server, Nginx Web Server.

References

Available on Request

Last updated: 10th December 2020