Saif Elkholy

+1 (514) 882-4471

https://github.com/kholysa
saif.elkholy.ca
saif@elkholy.ca

Education

McGill University, Quebec, Canada — September 14' – present

B.Eng. in Computer Engineering — (Expected graduation December 19')

- McGill Undergraduate entrance award scholarship: Awarded to top 1-2% of a class
- **Academic Interests:** Signals and Systems; Operating Systems; Embedded Systems
- **GPA:** 3.52

Professional Experience

District m, Montreal, Canada — January 17' – August 17'

Software Development Internship; Full Stack developer

- Intern for 8 months; full stack developer using React Javascript and Symfony3 frameworks
- Agile, TDD development of a web product (Team 'Sprint' workflows)
- Used React-Redux and wrote middleware to hook into the Redux life cycle for a fluid UX
- Built forms from symfony3 native components, manipulated a MySQL database, and validate API form-data
- JIRA, Bamboo and Bitbucket for project management, continuous testing and integration, and git version control
- Accountable for producing high quality code within my scope of work

Mobeewave, Montreal, Canada — May 18' – December 18'

Embedded Systems Internship; Quality Assurance and Testing

- 8 Month internship; ran test suits for L2 Certification with Mastercard using the KaNest ICC Software
- 2 week Sprints, git and Clubhouse workflow
- Analysed test logs generated by our product from L2 Mastercard test plans to write up a progress report
- Wrote clear and concise Excel reports to send back to the lead Engineers

Engineering Projects

Autonomous Drone Navigation – Osnabrueck University, Germany — https://github.com/kholysa/CopterMove — *May 19' – August 19'*

- Designed and developed a python solution to path plan, localise and navigate a Parrot drone
- Designed the software with regards to constraints such as moving accuracy, and navigation in a closed greenhouse
- Built separate python libraries to keep modularity high (pip package "path-planning-kholysa")
- Interface my solution with a previous master's student's work to accurately localise the drone

Magnetic Resonance Spectroscopy Data Analysis – McGill Design Project — https://bitbucket.org/selkholy/mrs-design-project/src/master/ — *September 18' – April 19'*

- Working with Prof. Jamie Near to design and build a software tool that analyses MRS data alongside MRI data
- Built a modular and scalable Python project with clear and concise documentation
- Used previously built tools by the Neuroscience community to test the results produced by my software

Magic Mirror — https://github.com/kholysa/MMirror — June 16' – August 16'

- Designed and developed an open source C# program to run on the Raspberry Pi (running Ubuntu Mate)
- Used Rest-APIs from multiple servers to get weather and stock data, using algorithms to view relevant data
- Interfaced the program with "E18-D50NK" I.R. sensor to switch between Weather and Stock view

Skills & Extras

Languages: English (fluent) Arabic (fluent) French (basic conversation)

Computer: Rest-ful applications, Php Symfony, React JS, C# & .NET, Linux shell, Operating Systems, Excel, HTML CSS, Continuous Integration

Passion: Snowboarding, Squash, Football, Falafel, Theatre tech