KOUTHAR WALED

Computer Science student with a love for ideation, iteration, and innovation.

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WORK EXPERIENCE

KUKA Robotics
Robotics Product Manager/Software Developer

May 2019 – Present

- Spearheaded initiative to organise **product creation process**: designed, developed, iterated a **customer focused** product life-cycle protocol to be used by teams of **4-10** sales representatives, project managers, and engineers for **nationally** based products.
- Developed and tested a **HMI** in **Swift** with a dynamic UI responding to updates from a REST based robot application showcased to **5000+** customers, gaining sales leads for KUKA Robotics Canada.
- Wrote effective and concise **user oriented documentation and manual** with custom diagrams
- **Designed specifications** and **developed** application for automated **LEGO** assembly and dis-assembly robot showcasing compliance and **accuracy within 0.5mm**.

FIRST Robotics Canada
Project Coordinator Intern

November 2017 – February 2019

- **Designed, developed and launched** a series of Robotics **Java** Tutorials explaining robot mechanisms and sensor applications, available to **150+** FIRST Robotics teams with **700+** views since January 1st, 2019.
- Spoke as a Webinar panelist about **command-based/object-oriented robot programming**, assisting **100** people and their teams.

PROJECTS

FIRST Robotics Competition Projects

September 2015 – Present

- Utilized motor controllers, pneumatics, encoders, analog, digital ultrasonic, colour and **LIDAR** sensors **CAN bus systems**, and **PID loops** using the FIRST Robotics Competition, and Cross the Road Electronics APIs on a team in **Java**.
- Led mentorship for programming on a Rookie team in 2017/2018 which **won Ontario Provincial Championships** and was ranked **highest Rookie seed of 400+ teams**.

LEADERSHIP

Hack the North
Sponsorship Coordinator

February 2019 – Present

- **Iterated and launched** an improved sponsorship package, analysing and **extrapolating sponsor needs and wants**.
- Raised **$120k+** to accomodate for **50% growth** of the event.
- Created forecast for leads and deals to predict progress to raise money for **1500+** attendees.
- Led initiative to organize for involvement of **65+** sponsors in diversity and inclusion activities.

LEGO Robotics without Borders
Founder, Lead

March 2017 – September 2018   ⚲ Ontario, Morocco, Peru

- Led sponsorship, raising **$4,000** for materials and camps.
- Distributed LEGO Robotics kits and laptops to **63** underprivileged and under-served youth in **Morocco, Peru, and Canada.**
- Implemented infrastructure to allow program to grow to **80+** students.

EDUCATION

Candidate for Bachelor of Computer Science,
University of Waterloo

September 2018 – April 2023

- President's Honour of Distinction
- Residence Life Don

TECHNICAL SKILLS

Languages

- Java, Swift, C, Scheme (Racket), Python

Tools, Frameworks, Data

- Git, JIRA, JavaFX, Cross the Road Electronics, WPiLib, Reddit Praw API, RoboticsAPI, REST, PostGre SQL, JSON

Computer Tools and Skills

- MS Power BI, Excel, GSuite tools, Linux, MacOS, Windows, Technical Writing

LANGUAGES

- **High Proficiency:** English, French, Arabic
- **Elementary Proficiency:** Spanish, Japanese

AWARDS

LORAN Semi-Finalist

November 2017

- Rewarded to individuals with **outstanding community involvement and impact.**
- **Top 7% of over 5,000** applicants around Canada.

Breakthrough Junior Challenge

October 2017

- Created video explaining the **neuroscience of learning** with over **580** views
- **Top 5% of over 3,000** applicants around the world.

INTERESTS & ACTIVITIES

Swimming — Drawing — Painting — Singing — Volunteering — Tutoring