**Abdul-Aziz Al-Najjar**

Email: [azizknajjar@gmail.com](mailto:azizknajjar@gmail.com) **|** Phone: +966 503031947| Location: Riyadh, Saudi Arabia

Website: [Azizalnajjar.ca](https://azizalnajjar.ca/) **|** LinkedIn: [Linkedin.com/in/azizalnajjar](https://www.linkedin.com/in/azizalnajjar/)

# Education

**Carleton University, Ottawa, ON, Canada** **Jan 2022 – Jun 2023**

Master of Engineering (MEng), Electrical and Computer Engineering, Data Science Specialization

* Cumulative GPA: **3.92/4.0.**
* Part of the Multimedia Research Group, under the supervision of Prof. Marzieh Amini

**Middle East Technical University, Ankara, Turkey Feb 2017 – Jun 2021**

Honor Bachelor of Science (BSc), Electrical and Electronics Engineering

* Cumulative GPA: **3.3/4.0 (Dean's Honor List - Top 5%)**

# Work Experience

**Research Associate**  **Sep 2022 – Current**

Carleton University - Natural Resources of Canada (NRCan), Ottawa, ON, Canada

* Conducted research in infrastructure monitoring using machine learning techniques with LiDAR datasets to classify point clouds and identify high-risk vegetation encroachment on powerlines.
* Trained advanced Neural Network models and data analysis methods to process extensive 900-million-point clouds to achieve accurate encroachment detection.
* Collaborated with cross-functional teams to align algorithms with project prerequisites, resulting in optimal performance, the preparation of two journal manuscripts, and a Master's project completion.

**Teaching Assistant Sep 2022 – Jun 2023** Carleton University - Department of Information Technology, Ottawa, ON, Canada

* Collaborated with instructors to enhance Applied Deep Learning and Computer Vision course materials.
* Graded assignments and provided constructive feedback to 30+ Data Science students in different modalities.
* Improved clarity of course contents, for topics such as regression (simple, multivariate), classification (binary, multi-class, multi-label), clustering, object detection, data augmentation, and multiple deep and machine learning techniques.

# Internships & Volunteer Experiences

**Rebranded Group - Logistics, Board Member,** Ottawa, ON, Canada **Mar 2022 – Sep 2023**

**Muslim Student Association - Volunteer,** Carleton University, Ottawa, ON, Canada **Feb 2022 – Sep 2023 Problem-Solving Society - Co-founder, Logistics Director,** METU, NCC,Turkey **Feb 2018 – Jun 2021 KIB-TEK - Electrical Engineer (Intern),** Nicosia**,** Cyprus **Jun 2020 – Aug 2020**

**ACES Co. - Electronics Engineer (Intern),** Riyadh, Saudi Arabia **Jul 2019 – Aug 2019**

# Skills

* **Problem-Solving:** Utilizing data analysis, quantitative modeling, and creative strategies to address complex business challenges.
* **Project Management and Team Collaboration:** Proficient in leading and working within cross-functional teams, collaborating with academic and research teams to achieve project goals and contribute to scholarly publications.
* **Communication and Presentation Skills:** capable of simplifying technical concepts for diverse audiences and refining educational materials.
* **Adaptable and innovative**, co-founded the Problem-Solving Society, showcasing leadership and critical thinking.
* **Technical Expertise:** Expert in programming (Python, R, C/C++), database management (SQL), advanced data analytics (Pandas, Matplotlib, Seaborn, TensorFlow, Scikit-Learn, XGBoost), design (MATLAB, SPICE, CAD), and business intelligence tools (Tableau, Power BI, Excel).
* **Multilingual Proficiency:** Fluent in English and Arabic, facilitating effective communication in varied cultural settings.