## Abdulrahman Tabbaa

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### Education

## Georgia Institute of Technology

Master of Science in Electrical and Computer Engineering, GPA: 3.85 Graduated: December 2024 Bachelor of Science in Electrical Engineering, GPA: 3.85 Graduated: December 2023

Minor in Computer Science (Artificial Intelligence)

Relevant Coursework: Machine Learning, Intro to Computer Vision, Intro to AI, Data Structures and Algorithms, Computer Communications, Wireless Networks, Advanced DSP, Digital Communications, Electric Vehicles, Control System Design, Basics of SysArch, Microelectronic Circuits

# **Work Experience**

Georgia Tech College of Computing, Teaching Assistant, Machine Learning Course August 2023 – December 2024

- Created homework and notes for 1000+ students to assess mastery of lecture material
- Assisted students for 3 hours weekly to enhance understanding and interest in course material
- Helped develop automation tools on Gradescope to improve grading accuracy and speed

Texas Instruments, Intern, Applications Engineer Intern

Santa Clara, CA

June 2022 – August 2022

- Developed an application guide to help customers comprehend the SPI protocol and configure it accurately
- Advertised use cases of FPD-Link SERDES devices to stakeholders thereby retaining customers
- Implemented a SPI controller/ peripheral pair in C, enabling repetition of experiments and further improvements

## Skills

Programming: Java, Python, Javascript, HTML/ CSS, React Native, Kotlin, C/C++, VHDL

Instrumentation: FPGA Board, microcontrollers, oscilliscopes, signal analyzers, surface-mount soldering Software: OpenAl, Langchain, PyTorch, Firebase, Git, Android Studio, SPICE, Wireshark, ns3

Arabic (fluent), and Spanish (intermediate) Languages:

#### **Projects**

**Commuter Partner** August 2025

Android, background app which provides location services to other apps (messages, email)

Generates ringtones when entering a marked destination, helping commuters sleep without missing a stop **Trainable AI Chatbot** January 2024 - August 2024

AI RAG chatbot with GPT-3.5-turbo capabilities hosted on a NextJS server

- Trained the model on issues faced by students to reduce FAQ generation time by over 300%
- Programmed a customizable, user-friendly training feature to tailor the chatbot to the preferences of the user

**Scam Website Detection** May 2023 - July 2023 Project which applies machine learning models to predict whether a website is fraudulent or safe

Analyzed data with over 88,000 points and 111 features to achieve an f1 score of 91% and accuracy of 94% Rubik's Cube Solver November 2021 - May 2022

A contraption capable of physically solving a 3x3 Rubik's Cube

Compiled over 6000 lines of code in C++ and established I2C communication between a microcontroller, an Arduino Uno, 7 servo motors, and 2 color sensors to solve the cube in an average of 70 moves using CFOP

#### Certifications

**Qualcomm 5G Introductory-Level Certificate** Fundamentals of Engineering (FE) in ECE

May 2024 June 2025

### Leadership

# **GaTech Muslim Students Association Vice President**

August 2021 – May 2022

- Collaborated with 6 board members and co-orchestrated 40+ events, some with over 200 attendees, throughout the year to satisfy the religious, social, and professional desires of the 110+ members
- Communicated with the non-profit PCRF to organize a marathon-weekend initiative fundraising over \$15,000