

Husain Hashem Altelly

Abu Dhabi, United Arab Emirates | Syrian national | Golden Visa holder

+971 56 300 5126 | HusainAltelly@outlook.com

linkedin.com/in/husainaltelly | github.com/Hualt7 | husainaltelly.dev



Portfolio

Career Objective

Robotics and Artificial Intelligence undergraduate at Khalifa University seeking a Summer 2027 research internship in robot motion planning and perception. Offering hands-on experience implementing sampling-based planners in Python, filtering inertial sensor data on a balancing robot and analysing camera-based ball tracking for a RoboCup team.

Education

Bachelor of Science in Robotics and Artificial Intelligence

August 2024 - May 2028 (expected)

Khalifa University, Abu Dhabi

Transferred from Computer Engineering to Robotics and Artificial Intelligence in January 2025.

Grade point average: 3.20/4.00 | 70 credits completed | 15 credits in progress

Selected coursework (in progress): ROBO 301 Signals and Systems; ROBO 302 Robot Sensing; ROBO 303 Robot Modelling; ROBO 304 Design of Robotic Systems.

Khalifa Bin Zayed Secondary School

August 2020 - May 2024

Secondary School Certificate, Advanced Stream | Average: 97.92%

Experience

Team Member

September 2026 - Present

KURA RoboCup Team, Khalifa University, Abu Dhabi

- Analysing ball-tracking and goalkeeper prediction logic in the team's Robot Operating System 2 software, focusing on camera measurement noise and incoming-ball trajectories.

Vice President

January 2026 - Present

Khalifa University Entrepreneurship and Innovation Club, Abu Dhabi

- Co-leading planning and operations across four club departments.
- Co-organised the September 2026 club fair stand, introducing interactive games and engaging visitors.
- Secured judging support from Tetr for a joint pitch competition while serving as Events Chair.
- Earned promotion from Events Chair to Vice President in May 2026, four months after joining.

Event Staff

December 2025 - February 2026

Vibes Staffing, Abu Dhabi

- Handled ticket scanning, visitor assistance and customer service at the Mother of the Nation Festival and other Abu Dhabi event assignments.

Robotics Projects

Model T42 Robotic Gripper

January 2026 - May 2026

Khalifa University | ROBO 204 Physical Embodiment of Robotic Systems | Team project

- Implemented the Yale OpenHand T42 gripper in a four-person team, combining MATLAB analysis, tendon-driven assembly and Dynamixel motor calibration for basic grasping.

Robotics Projects (continued)

Two-Wheeled Balancing Robot

April 2026

Khalifa University | ROBO 205 Electronic Circuits | Team project

- Built and tested the robot in a four-person team, pairing a complementary filter for tilt estimation with proportional motor control in MicroPython; it balanced for about 30 seconds in its best runs.

Robot Motion Planning

August 2025 - December 2025

Khalifa University | ROBO 201 and ROBO 202

Motion Planning Algorithms for Robotics; Software Development for Robotics

- Implemented Rapidly Exploring Random Tree and Probabilistic Roadmap algorithms in Python for collision-free two-dimensional routes, with A-star roadmap search.
- Created route visualisations and used a test harness covering 54 parameter configurations (27 for each algorithm) for sampling, connection radius and step size.

Software Projects

Nomo Family Safety and Coordination

July 2026 - September 2026

Team prototype | Flutter, FastAPI, PostgreSQL

- Co-developed a mobile prototype combining shared family calendars and optional camera monitoring; refined onboarding, calendar explanations and camera setup.
- Added regression tests for interface behaviour, cached data and failure recovery; evaluated Android workflows and a local fall-detection demonstration using staged trials.

Flowra Conversation Intelligence Application

March 2026

Team prototype | Electron, React, TypeScript, Supabase

- Co-developed a desktop prototype for conversation review, response practice and live coaching, combining audio capture, automated transcription and post-conversation analysis.

AURORA Mission X

October 2025 - November 2025

SpaceAware Application Challenge | Team project | Flutter, Dart, Flame

- Co-developed a 14-stage educational landing simulator with Gemini guidance, flight and fuel modelling, and a separate interactive Q-learning demonstration.

Skills

Programming: Python, MicroPython, MATLAB, Dart, TypeScript

Robotics: Robot Operating System 2, Gazebo, RViz, Cartographer, simultaneous localisation and mapping, motion planning, inertial sensor filtering, motor control

Software and tools: Flutter, React, Electron, FastAPI, PostgreSQL, Supabase, Git, Linux, automated testing

Collaboration and communication: Team project coordination, event organisation, customer service

Languages: Arabic (native), English (fluent)

English test: International English Language Testing System: overall band 7 (9 September 2023)

Achievements

- Won the Most Useful Track award for Flowra, Socia Global Build Challenge (March 2026).
- Placed third with AURORA Mission X, SpaceAware Application Challenge (November 2025).
- Earned Dean's List recognition at Khalifa University (Fall 2024).
- Received Top Student recognition at Khalifa Bin Zayed Secondary School every year from 2020 to 2024.