Arham Ahmad

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EDUCATION

GEMS Wellington International School (WIS), Dubai, UAE

International Baccalaureate Diploma Program: 08/2025 – 07/2027
Higher Level: Maths Analysis and Approaches, Physics, English A (Language & Literature)
Standard Level: Economics, Global Politics, Ab initio Spanish
IGCSE/GCSEs: 08/2023 – 07/2025
Achieved 9s, 8s and 7s across GCSEs subjects;
Received **Distinction** in English Language (Spoken)

IELTS Academic – overall band score: 8.5

Courses

Immerse Education, Group Accredited Online Research Program 06/2025
- Developed a research project focused on Business, Economics and Entrepreneurship.
- Received NOCN Level 3 Award on my research paper titled, "**Quietline**: A subscription-based service that gives public transport users access to designated quiet zones."

Brown University Pre-College Program: Introduction to Computational Mathematics and Big Data Visualization. 06/2024
- Studied Numerical Analysis, Parallel Computing, Data Visualization and Programming to solve scientific and engineering problems.

INSPIRIT AI: Generative AI & ChatGPT 12/2023
- Explored core Generative AI concepts, including RAG and model fine tuning.
- Developed skills in Python, transformer models and chatbot design.

INSPIRIT AI: AI Scholars Program, ***Planet Hunters: Searching for Exoplanets*** 07/2023
- Applied machine learning models to astrophysics, using NASA Kepler Space Telescope data to detect exoplanets.
- Built expertise in data preprocessing and handling scattered and disparate datasets.

Awards and Honours

American Invitational Mathematics Competition (AIME) 10/2025 – 02/2026
- Earned a qualifying score of 99 on the **American Math Competition (AMC) 12A** advancing to the **American Invitational Mathematics Examination (AIME)**, an invitation-only national mathematics competition.

United Kingdom Maths Trust Competition (UKMT) 2024-2025
- Received Gold in **Senior Mathematical Challenge 2025 and Intermediate Mathematical Challenge 2024** (Top 8% amongst 100k+ participants)

Challenge ME Maths Championship 10/2025 – 04/2026
- Finalist & Top 100 performers representing **Wellington International School**, demonstrating strong mathematical problem-solving skills.

MIT, Engineers Without Borders USA, Science & Engineering Competition 03/2026

- Awarded 2nd place (UAE, Team), 3rd place (Middle East & Africa, Team) & Honors (Individual).

British Physics Olympiad 03/2026

- Received Bronze Award in the **Senior Physics Challenge** for Problem Solving.

Innovation & Digital Technology 10/2025

- Received Scholarship Commendation Award at **Wellington International School** for outstanding leadership in Innovation space.

Dubai Science & Economics Fair 11/2023 – 12/2026

- **Best Research Paper Award** – Authored a research paper on "Nitrogen, Phosphorus, and Potassium (NPK) detection in soil for plant growth." Received a 35% scholarship to **The Immerse Education Accredited Online Research Program** in 2025.
- **Best Poster Award –** Developed an AI-powered web application to predict loan viability using machine learning techniques in 2024 DSEF.

World Scholar's Cup Tournament of Champions (Yale University) 11/2022

- **Final-round participant**; received 6 medals (Gold & Silver) for excellence in debate, writing, and interdisciplinary knowledge.

Project Experience & Internships

Loanalytics (Founder of www.loanalyticsuae.com) 06/2023 – 01/2026
Student Researcher and Platform Developer

- Engineered an AI-driven financial analytics platform integrating loan calculation, stock prediction, and loan eligibility assessment tools.

Smart Soil Sensor using NPK 01/2025 – 04/2026
Student Researcher

- Designed and built a prototype system to detect Nitrogen, Phosphorus, and Potassium levels in soil.
- Implemented sensor-based data acquisition and interfaced with mobile applications for real-time monitoring.
- Worked on hardware-software integration, including data processing and user interface display.
- Aimed at improving agricultural efficiency through accurate soil analysis.

IDENFO Ltd 06/2025 – 07/ 2025
AI/IDV Intern

- Developed an AI-based identity verification systems using computer vision and biometric analysis to identify fake passports, Emirates IDs and credit cards.

Dar Sidara Company: Urban Intelligence Lab at Dar Research Affiliate of MIT 10/2024 – 03/2025
Student Intern

- Engineered possible solutions for a 15 Minute Walkable City using OSMnx and Google Maps API to help develop solutions for implementation.

Virtual Engineering Program at A Learning Lab 05/2026 – 06/2026

Co & Extracurricular Activities

Student Lead at KS4 Maths Helpdesk 09/2025 – 12/2026

- Contributed to the **WIS** Mathematics Community by taking a lead role in the WISdom peer-support programme, offering guidance and clarification to students.

Deputy Innovation Coordinator, WIS Science Fair Club 01/2025 – 06/2025

- Co-led weekly EEE club Sessions, driving ideation and development of engineering focused projects. Mentored students in design, problem-solving, and project execution for science fair submissions.

Shapes Robotics Digital Leader at WIS 08/2023 – 12/2024

- Co-led weekly EEE club sessions on Shapes robotics. Trained staff and students at Wellington Cluster Schools. Collaborated with Fable Shape Robot to code programs for people with Physical challenges to express art.

Football & Futsal EEE Club 09/2024 – Present

- Active participant at **WIS**; periodically selected to represent the school team in competitive inter-school football matches.

WISMUN

- Member of WISMUN club; participated in The Second General Assembly (GA2) 11/2024

Elite Volleyball Club 03/2023 – 01/2025

- Play competitive volleyball with the club

Chess Club

- Competed in inter-Dubai chess competitions 02/2023 – Present

Community Service

Dubai Cares: Students for Students 01/2026

- Helped raise AED 40,000 through a student-led football tournament at **WIS**. Drove school-wide engagement to advance global education initiatives.

Munna Ghar Orphanage 02/2026 – 03/2026

- Reached out to family and friends to raise PKR 132,500 to purchase 50 children's sports uniforms and shoes.

The Citizens Foundation (TCF) Baghbaan Ambassador 09/2025 – 12/2025

- Fundraised AED 13,567 through UAE's YallaGive Platform, contributing to the education of approximately 22 deserving children in Pakistan for an entire year.

TCF UAE x Dubai Offroaders - Desert Clean-Up Drive 12/2025

- Cleaned up Al-Qudra Desert with 20+ participants from all walks of life; collected cigarette butts, glass pieces, plastic bags, soda cans to car fenders to be recycled.

Technical Skills

Python, Arduino, HTML, CSS**,** Node.js, Google Maps API, **Geospatial & Mapping Technologies:** OpenStreetMap, OSMnx, GeoPandas, **AI/Machine Learning & Computer Vision:** TensorFlow, Roboflow etc.