

Ghaliya Wahby

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Jumeirah Park, Dubai, UAE

Education

American School of Dubai	Dubai, UAE
APs 2024 - 2025: Precalculus, World History.	
APs 2025 - 2026: Calculus BC, Microeconomics, Chemistry, Computer Science Principles.	
APs 2026 - 2027: Macroeconomics, AP Statistics, Physics C, Multivariable Calculus.	
Columbia University Pre-College Program	June-July 2025
Introduction to Economics, Business and Finance	
Culver Summer School	June-Aug 2022

Awards and Honors

Award for Best Prototype, Dubai Science Fair	2026
AP Scholar with Distinction Award	2026
Award for Best Interdisciplinary Project, Dubai Science Fair	2025
Mu Alpha Theta (Math Honor Society)	2025-2027
National Honor Society	2025-2027
Global Seal of Bilingualism - Functional Fluency in Arabic	2024-2025
Tri-M Music Honor Society, National Association for Music Education (NAfME)	2023-2027
Coaches Award, Junior Varsity Volleyball - recognized for leadership, mentorship, and positive team impact	2024

Internships & Professional Experience

Summer Intern - EVA Group, Egypt	July 2026
- Completed a four-week rotation across EVA Group's factory and corporate offices, gaining hands-on exposure to manufacturing, production management, business operations, and cross-department coordination. - Developed practical understanding of process optimization, resource allocation, operational efficiency, and quality standards, strengthening her interest in industrial engineering and large-scale operational problem-solving.	
Student Intern - Alliad (Agility Group Company)	June-July 2025
Led a team of four interns on a sustainability-focused project promoting environmentally responsible practices; presented the final work to the CEO and senior management.	
Student Intern - Morgan Stanley, Step In, Step Up: Women in STEM Program, Dubai	Feb 2025
Participated in the \$1 Million Case Study Challenge, applying quantitative reasoning and financial analysis to investment decisions.	
Student Intern - Dell Technologies	Dec 2024
Shadowed the Partner Marketing Manager, attended strategic meetings, and supported preparation for the Dell Technologies Forum Dubai through exposure to negotiations, proposals, contracts, partner marketing, and cross-functional coordination.	

Project & Research Experience

Founder & Developer - AlziMate (alzimate.co)	2026-Present
- Designed a multilingual, person-first application that helps people living with Alzheimer's stay connected with familiar people, memories, routines, and personal identity. - Built personalized memory profiles containing photographs, relationships, life events, voice messages, music, videos, favourite activities, routines, preferences, and family stories. - Created separate experiences for individuals, families, caregivers, and care organisations, with simplified elderly-friendly navigation, large controls, role-based access, and secure account features.	
Founder & Developer - Calculyt (calculyt.net)	2025
<i>Free Mathematics Learning Platform</i> - Created a student-friendly mathematics platform for Grades 2-10 offering free lessons, tutorials, videos, notes, worksheets, activities, and guided practice. - Organized learning across numbers and operations, algebra, geometry, and problem-solving, with login-based progress support and downloadable learning resources.	
Student Researcher - Dance & Therapeutic Well-being	2025
<i>Interdisciplinary Research Project</i> - Explored how structured dance and movement-based therapeutic activities can support emotional expression, confidence, social connection, and overall well-being. - Connected research in creative arts and wellness with practical activity design, drawing on long-term dance experience across ballet, tap, jazz, lyrical, hip hop, and musical theatre.	

Researcher & Developer - Smart Water Quality Monitoring System

2026

ESP32 + Blynk IoT Environmental Monitoring

- Developed a low-cost IoT system that measures Total Dissolved Solids (TDS), turbidity, and water temperature in real time using an ESP32, TDS sensor, turbidity sensor, and DS18B20.
- Transmitted sensor readings over Wi-Fi to a Blynk mobile/cloud dashboard and classified water conditions using sensor thresholds, demonstrating portable real-time environmental monitoring.

Industrial Engineering Project - Streamline Metrics

2026

- Developed a solar-powered conveyor prototype combining automated product counting, camera-based visual inspection, processing-time measurement, and performance tracking.
- Used Raspberry Pi computer vision to evaluate products by predefined characteristics such as colour, shape, and size, while maintaining total production counts and operational metrics.
- Implemented AI-based safety monitoring that detects a person near the conveyor and automatically stops the system, integrating renewable energy, automation, quality control, and workplace safety.

Extracurricular and Leadership Activities

- Student Government Association (SGA) - Grade-Level President: Serves as a link between the student body and administrators and helps plan school-wide events and assemblies.
- National Honor Society - Vice President/Treasurer: Manages society funds and coordinates with the school finance team for events throughout the year.
- Chair, Model United Nations (General Assembly): Led debate sessions, mentored delegates, and guided resolution development and committee flow.
- Member, The Hague International Model United Nations: Participated in advanced debate on global issues and collaborated with delegates from diverse international backgrounds.
- Dance Coach: Coached the middle school dance team, taught choreography, and developed confidence, teamwork, and performance readiness.
- Captain, Badminton Team: Promoted to varsity a year early and served as captain for two years as one of the youngest team members.
- Dance: 12 consecutive years of ballet with Royal Academy of Dance certifications; advanced training in tap, jazz, lyrical, hip hop, and musical theatre; competed locally and internationally, including IFDPA Disney Paris and World Dance competitions in Orlando.
- Member, Community Choir: Performed in a multi-generational school choir alongside students, teachers, and parents.
- Member, SEENAH: Supported annual donation drives, community appreciation events, planning, setup, and outreach.

Community Service

Nepal Community Service Expedition

- Collaborated with residents of a remote mountain village to redirect a river threatening a sacred religious site and built a natural hillside staircase to improve safe river access as part of a sustainable, community-led infrastructure effort.

Calculyt - Founder

- Provides free mathematics learning resources including worksheets, video lessons, notes, activities, and practice materials to improve access to quality mathematics education.

Languages & Technical Skills

Languages: Arabic (Native), English (Fluent), French (Intermediate)

Technical: JavaScript, PHP, HTML/CSS, SQL/MySQL, ESP32, Raspberry Pi, Blynk IoT