ALEJANDRA COETO SANCHEZ

+52 8111751674
alecoetos@gmail.com

www.linkedin.com/in/alecoeto

https://github.com/Ale-Coeto

Web page (portfolio):
https://alecoeto-portfolio.vercel.app/

EDUCATION

Tecnológico de Monterrey
Computer Science Engineering

Expected: June 2026
GPA: 98.5/100

Relevant courses:
Computational thinking (Python)
Object oriented programming (C++)
Data Structures and Algorithms (C++)

Prepa Tec Eugenio Garza Lagüera (2019-2022)
International Baccalaureate Diploma

IB score: 42/45
GPA: 98/100
Honors

Relevant courses:
Computer Science HL (Java)
Business and Management HL

PROJECTS

Movie & Show Tracker
July 2023 - Present

- Developed a web app to keep track and search for trending shows and movies, make a watch list, rate content and keep discussion groups with friends and the community.
- Used **React** and Tailwind for front end, **TypeScript**, Prisma, TheMovieDB API, and **MongoDB** for back end and **NextAuth** and **Google OAuth** for user authentication. Deployed successfully in Vercel.

Roborregos Web
Sep 2022 - Present

- Working on the authentication and registration of users for an **inventory webpage**.
- Using **React** and **Tailwind** for the front end, **Typescript**, **Prisma** and **Postgresql** for back-end and data management and **Azure AD** for user authentication.

Robocup Soccer
Dec 2022 - Apr 2023

- Developed two soccer playing robots by programming sensor libraries, vision and movement algorithms.
- Used **arduino CLI** and **CPP** for robot control and **micro-python** for **computer vision algorithms.**
- Achieved **3rd place** with my team of three in the national Robocup Soccer Lightweight competition with **Roborregos**.

Hackathon Caterpillar
May 2022 - Jun 2022

- Created a **smart shower head prototype** using **Arduino**, featuring an electrovalve system programmed with temperature and ultrasonic sensors. Designed a CAD product.
- Achieved **first place** with my team of three.
- Presented the proyect in an interview with *Bar Emprende*, which was summarized in the magazine *MIT Sloan Management Review*.

Agenda Desktop App
Aug 2021 - Mar 2022

- Developed a **desktop application** for a small business, integrating an agenda and customer record system.
- Used **java**, **OOP**, **searching** and **sorting algorithms**, **stacks**, **hashtables** and libraries for calendars and editing of xlsx files.

LEADERSHIP

Roborregos
Dec 2022 - Present

- Software developer at the **representative Robotics Team** from Tecnológico de Monterrey
- Competed in regional and national robotics tournaments representing ITESM.
- Currently part of the Robocup @Home team, developing in **ROS** and **machine learning** for **computer vision**.

WIT
Mar 2023 - Present
Vicepresident

- Coordinating the student group **Women in Technology** from Tecnológico de Monterrey as vicepresident.
- Organizing events with my team to enhance the progress of women in tech and promote inclusiveness.
- **Taught programming** and app development with the MIT App Inventor tool to 20 middle school students.

VantTec
Aug 2022 - Present

- Joined the student **research group** *Non Tripulated Autonomous Vehicles* from Tecnológico de Monterrey in the Roboboat team on the mechanics and software areas.
- Currently learning Ros 2 (Robot Operating System).

VOLTEC Robotics
Aug 2019 - Present
Mentor

- Leading the engineering department of the high school team VOLTEC Robotics (30 - students).
- **Teaching countinously robotics** to more than 20 3rd grade students and over 20 highschool students.
- Mentoring the **FIRST FTC** (9 students) and **FRC** (over 20 students) teams, achieving top 10 place in the national FTC competition and earning a place on the FRC world championship.

PROGRAMMING LANGUAGES

3 years	Java
1 year	C++, Python
<1 year	Javascript, Typescript, Swift, Matlab, R

TECHNOLOGIES

Git, HTML, CSS, React.js, Next.js, TailwindCSS, ROS, ROS2, OnShape (CAD), Lightroom, Arduino, MongoDB, VSCode, MacOS/ Linux environments, MySQL, Azure Services, Node.js, Bash, Prisma, OAuth, Vercel.

LANGUAGES

English (B2)
German (B1)
Spanish (Native)

AWARDS

April 2023	3rd place in the Robocup Soccer Mexican Tournament	June 2022	1st Place in *Educar Niñas Cambia el Mundo* hackathon (teams)
April 2023	Best Technical Challenge RCJ TMR 2023	May 2022	Diploma for student development and sport leadership
April 2023	Distinguished Students in Engineering Recognition	May 2022	Diploma *Orgullo Prepa Tec* and Best Grade Averages