

Sebastian Enrique Perea Lopez

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Gender: Male Date of birth: 28/04/2001 Place of birth: Cali, Colombia Nationalit

v: Colombian

ABOUT ME

I am a passionate software engineer and creative thinker with a Master's Degree in Computer Science from Politecnico di Milano and an Engineering Degree from Universidad del Norte. With a strong foundation in software development, I have experience building innovative solutions—from web applications to interactive simulations and robotics systems. My work in robotics includes projects focused on sensing, localization, and real-time interaction, combining technical depth with creative problem-solving.

Explore my portfolio on Behance to see my creative work, and check out my code on GitH ub to learn about my technical projects.

WORK EXPERIENCE

Panaderia Nueva York

City: Barranguilla | Country: Colombia

[01/06/2021 - 31/07/2021] **Processing Time Analysis**

Creating an analysis of the time that it takes for a product to be manufactured, packaged, and stored from the raw material to the final product. Use of Excel and MS Office products.

Universidad del Norte

City: Barranguilla | **Country:** Colombia

[01/02/2021 - 01/06/2023] **Students assistant**

Teaching and academic support to university students with a focus on all those students who are taking the subject of Algorithms and programming.

Teleperformance

City: Barranquilla | **Country:** Colombia

[19/08/2021 – 11/08/2023] Live chat agent

Customer and staff management.

Fast and effective troubleshooting.

High management of computing devices and specialized platforms.

City: Milano | **Country:** Italy

[01/02/2024 - Current] **Freelancer**

Developed custom web and software solutions tailored to client needs, using modern front-end and back-end technologies.

Communicated with clients to define requirements, provide updates, and ensure timely project delivery.

Integrated APIs, databases, and cloud services to build scalable and maintainable systems.

Delivered clean, well-documented code and provided ongoing technical support when needed.

EDUCATION AND TRAIN-

[01/06/2019] **Bachelor**

Colegio La Medalla Milagrosa https://www.colmemi.edu.co/wp/

Address: Cl. 86 #64-75, 080001, Barranquilla, Colombia

[01/01/2018 – 01/06/2019] Technician in Development of information systems and mobile devices

CEAS https://ceas.edu.co/

Address: Cra. 57 #72- 143, 080001, Barranquilla, Colombia

[01/09/2019 - Current] **Systems Engineer**

Universidad del Norte https://www.uninorte.edu.co/

Address: Área metropolitana de Barranguilla, Kilómetro 5 Vía, Barranguilla, Colombia

Laurea Magistrale - Computer Science and Engineering - Ingegneria

[05/09/2023 - Current] **Informatica**

Politecnico di Milano https://www.polimi.it/

City: Milano | Country: Italy

LANGUAGE SKILLS

Mother tongue(s): Spanish

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Italian

LISTENING B1 READING B1 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Office

Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access | Google Suite (Doc, Slides, Form, Sheet, Drive)

Programming

Javascript(Nodejs, ExpressJs) | JSON | Github | Web Development | Python | Object -Oriented Programming | CSS | HTML5 | SQL | MySQL | JavaScript | Back-end (Flask, Django) | Azure and AWS | Python, Django, Django Restful api | Java

OS

Windows | Linux | MacOS | Android | iOS

Social Media

Instagram | Facebook | TikTok | Zoom | Teams | Youtube

DIGITAL SKILLS TEST RES-

	Information and data literacy	ADVANCED Level 6 / 6
	Communication and collaboration	ADVANCED Level 6 / 6
©	Digital content creation	ADVANCED Level 6 / 6
Zh)	Safety	ADVANCED Level 6 / 6
A	Problem solving	ADVANCED Level 6 / 6

Results from a self-assessment based on The Digital Competence Framework 2.1

HONOURS AND AWARDS

[2019] **Promigas Talent Scholarship Awarding institution:** Promigas - Uninorte

Scholarship for 100% of the system engineering degree.

Honor Roll Awarding institution: Universidad Del Norte

Outstanding student of the semester and career.

(2019-03) (2020-01) (2020-03) (2021-01) (2021-03) (2022-01) (2021-03)

Best United Nations Model Speaker Awarding institution: Colegio La Medalla

Milagrosa

2017 - 2018 - 2019

[2018] Best Science Fair Project Awarding institution: Colegio La Medalla Milagrosa

HOBBIES AND INTERESTS

Mobile development.

Web development.

Creation and development of video games.

Artificial Intelligence.

Augmented Reality.

Virtual Reality.

PROJECTS

[01/09/2023 - 01/02/2024] **Immaginario**

Immaginario is a speech therapy app designed for neurodivergent children, reimagined to streamline both remote and in-person therapy management. Developed in close collaboration with therapists, the redesign emphasizes simplicity in organizing therapy agendas and dynamically tailoring content to each child's progress. The app fosters a user-friendly experience while integrating advanced technologies, empowering therapists to manage sessions remotely and adapt resources in real-time. Immaginario also encourages caregiver involvement, creating opportunities for meaningful interaction with children. This innovative solution transforms speech therapy, offering a personalized, efficient, and inclusive approach for therapists, caregivers, and neurodivergent kids alike.

Links: https://www.behance.net/gallery/205215965/Immaginario https://shorturl.at/ dsvlv

[01/10/2023 - 14/02/2024]

CodeKataBattle

CodeKataBattle is a web application designed to simplify the lives of modern educators by managing coding tournaments and battles for students. The platform fosters skill development through engaging, interactive challenges, ensuring a fun and immersive learning experience. With a minimalist and user-friendly design, it emphasizes intuitive navigation and clear organization of UI components. Role-based access control enhances usability and security, giving users tailored access to relevant features. CodeKataBattle is more than a coding platform—it's a space where students collaborate, compete, and grow, with fair opportunities for everyone to showcase their abilities.

Links: https://www.behance.net/gallery/205259021/CodeKataBattle https://shorturl.at/ ZOs7p | https://shorturl.at/845lo | https://shorturl.at/roVkb

[01/03/2024 - 01/08/2024] **DemHouse**

DemHouse is a platform designed to connect individuals seeking shared housing or rental properties, featuring a user-friendly matching system. It leverages location-based services and secure communication to simplify the search for ideal housing. Housers list available properties, while **Cohousers** find housing opportunities based on preferences like budget and location. By facilitating seamless communication between both parties, DemHouse provides an efficient, reliable solution for housing needs.

Link: https://www.behance.net/gallery/205260507/DemHouse

[01/08/2024 - 30/09/2024]

CrediYork

CrediYork is a financial tracking software tailored for Panadería Nueva York, designed to manage employee credits and funds with ease. Featuring an intuitive interface, the platform empowers administrators to oversee finances and lending activities efficiently. By streamlining accounting processes, CrediYork enhances accuracy and ensures seamless financial management for the organization.

Link: https://www.behance.net/gallery/213059393/CrediYork

[10/01/2024 - 18/01/2025]

Believes

Believes is a Unity-developed narrative game where players control Eve, a soul navigating a robot factory to uncover the truth behind humanity's eradication of robotic souls through the Qbot program. By possessing various robots, Eve battles factory defenses, exploring themes of identity, autonomy, and the conflict between emotion and control.

Link: https://polimi-game-collective.itch.io/believes

[01/10/2024 - 17/01/2025]

SimCon

SimCon is a modular Unity-based construction site simulation designed as a digital twin to emulate machinery operations and interactions. The project integrates real-time sensor data and a custom API for dynamic, data-driven simulation experiences. Using C# scripts and the Behavior Bricks asset, it delivers realistic behavior modeling for tasks like construction, demolition, and transportation. SimCon offers flexibility for various site layouts, aiding construction managers in workflow optimization, operational timeline estimation, and decision-making through real-time monitoring and predictive analysis.

Link: https://www.fer.unizg.hr/rasip/dsd/constructionsite/project_description

[01/01/2025 - 28/02/2025] **Mapuka**

Mapuka is a mobile application designed for users who love exploring new locations and preserving memories of their journeys. Whether discovering a new city, hiking through nature, or tracking daily movements, Mapuka provides an interactive way to visualize exploration progress.

At the core of Mapuka is the **Fog of War** mechanic, where unexplored areas of the map remain hidden until the user visits them. This encourages users to explore new areas while also serving as a digital travel journal.

Links: https://github.com/sebaxe07/Mapuka https://www.behance.net/gallery/ 231368723/Mapuka

[16/04/2025 - 10/05/2025] Lotus Haven

Lotus Haven is an accessible Vue.js-based website for a yoga studio, designed to connect users with yoga classes, teachers, and wellness resources.

This project is built using Nuxt 3 and Vue.js, focusing on creating a beautiful and accessible yoga studio website. The main features include:

- · Class schedule and activity browsing
- Teacher profiles and information
- Searchable content
- Responsive design for all devices
- Strong focus on accessibility (WCAG compliance)

Links: https://www.behance.net/gallery/231369895/Lotus-Haven https://github.com/ sebaxe07/LotusHaven | https://lotus-haven.vercel.app/

[18/02/2025 - 10/06/2025] **BovisaBaby Localization Module**

A modular robot control system with LIDAR-based obstacle detection, human tracking, autonomous charging, and motor control capabilities. The system provides a web-based visualization interface for real-time monitoring.

Features

- LIDAR-based obstacle detection and tracking
- Camera-based human tracking with pose detection
- Robot movement control via Arduino interface
- April Tag detection for autonomous charging
- GPS geofencing capabilities
- Real-time visualization through web interface
- ZMQ-based inter-process communication
- Support for both hardware and simulation modes

Links: https://github.com/sebaxe07/BovisaBabyLMmodule https://vimeo.com/ 1105574616?share=copy

[01/02/2025 – Current] **Tino Robot**

A comprehensive control system for Tino, a multi-component robot featuring a mobile base, articulated head, and leg mechanism.

Tino Robot has evolved from a Raspberry Pi-controlled system to a modern ROS2-based implementation:

Current Implementation

The current version of Tino Robot is built with a modular architecture running on a Jetson Orin Nano:

- Base: Differential drive system with 2 wheels and a caster wheel
- **Head**: Three-servo platform providing pan and tilt motion
- Leg: Single-actuator mechanism
- Vision & Audio: Integrated camera and audio for SLAM and human interaction

The system provides real-time control via gamepad and includes advanced features like SLAM, human pose detection, and audio communication.

Link: https://github.com/sebaxe07/Tino-Robot

MANAGEMENT AND LEADERSHIP SKILLS

Teamwork

Troubleshooting

Leadership

Conflicts management

Impeccable organization and planning of classes

High capacity to adapt to pressure environments

Proven ability to manage times and objectives