



Jose Alejandro Concepcion Alvarez

Software Engineer | Ph.D student in Computer Science

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📄 SUMMARY

I have a degree in Automation Engineering and I am currently enrolled in a Ph.D. program in Computer Science.

As a software developer:

I have three years of experience developing web applications using JavaScript and Python frameworks. I have developed different complex interfaces for the UI and created several services for the backend.

I have created mobile applications for controlling cyber-physical systems.

All the experience accumulated was under agile work methodologies.

As a university student:

I have researched in the robotics field, working on and developing prototypes of wheeled mobile robots. I have participated in the ACM International Collegiate Programming Competition (ICPC), where I solved programming problems that require algorithm and data structure knowledge.

🎓 EDUCATION

11/2021 – present	Ph.D in Computer Science Gran Sasso Science Institute 🔗	L'Aquila, Italy
2014 – 2019	Bachelor in Automation Engineering (single-cycle 5 years) Technological University of Havana (CUJAE) 🔗	La Habana, Cuba

📁 PROFESSIONAL EXPERIENCE

11/2021 – present	Computer Science Ph.D. student GSSI 🔗 I have worked on projects related to robotics, IoT systems, and algorithms: <ul style="list-style-type: none">• The development of a self-adaptive strategy on top of PID algorithms for a two-wheel self-balancing robot. 🔗• The development of a microservice for waste image classification and materials label extractions. 🔗• The development of an algorithm based on Dijkstra modification for solving the SSSP on electric vehicles with battery duration constraints. 🔗• The development of a file browsing application for Linux that uses a multithreaded BFS algorithm. 🔗	L'Aquila, Italy
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07/2021 – 10/2021	React Developer BOOZ.cl Development and maintenance of an eCommerce platform for the sale of beverages. (https://booz.dev/) Working with NextJs framework, React components development using Redux, React hooks, and Tailwindcss.	
06/2021 – 09/2021	JavaScript Developer Alegra Development of microservices using AWS. Creation of lambda functions on NodeJs and Python environment. Development of integration with AWS services like S3, Aurora RDS, and Cognito.	Bogota, Colombia
09/2018 – 04/2021	Full Stack Developer Guajiritos Frontend development and backend development using JavaScript frameworks. <ul style="list-style-type: none"> • Development of a streaming web application based on Netflix design (techs: Node.js, Angular, MySQL). • Development of an ecommerce system with B2B and B2C business models for the Mercedes Benz agency in Cuba (techs: Node.js, Angular, MySQL, MongoDB, Ionic). • Development of hotel and events management system for HavanaturSA (techs: Node.js, Angular, Vue.js, MySQL). 	La Habana, Cuba
2019 – 2020	Trained Professor Technological University of Havana (CUJAE) I have taught practical classes about programming 8051 microcontrollers in assembly and C language. Also how to use the Matlab tool.	Habana, Cuba

CERTIFICATES

- Problem Solving Certificate (HackerRank) [↗](#)
- Front End Libraries (freeCodeCamp) [↗](#)
- Angular Certificate (HackerRank) [↗](#)
- APIs and Microservices (freeCodeCamp) [↗](#)
- ICPCID - ICPC - International Collegiate Programming ContestContest [↗](#)
- Data Analysis with Python (freeCodeCamp) [↗](#)
- Rest API Certificate (HackerRank) [↗](#)
- JavaScript Algorithms and Data Structures (freeCodeCamp) [↗](#)
- Node.js (HackerRank) [↗](#)
- React Certificate (HackerRank) [↗](#)
- SQL Certificate (HackerRank) [↗](#)
- Scientific Computing with Python (freeCodeCamp) [↗](#)
- Machine Learning with Python (freeCodeCamp) [↗](#)

SKILLS

Programming languages: (JavaScript, TypeScript, C++, C, Python)

Frameworks: (Angular, Vue.js, Node.js, React.js, Next.js, Electron, Flask, Pandas)

Databases: (MySQL, MongoDB)

Mobile Frameworks: (Ionic, React Native, AppSheet)

Version Control Systems: (Git)

Operating systems: (Linux, Windows, IOS)

AWS (Serverless Api Gateway, Lambda functions, S3, RDS)

Embedded systems (Raspberry Pi, Arduino)

OPEN SOURCE CONTRIBUTIONS

Linux Search Everything

linux application: .deb, .rpm, .zip

It is a faster and more flexible file browser for Linux. It offers rich capabilities such as case sensitivity, regular expression-based search, search by selecting multiple file types, control of the algorithm's depth, and more.

ngp-image-picker

npm package

Angular library for selecting, editing and compressing images in the web browser. You can apply filters, change formats, resize and compress the image.

react-image-picker-editor

npm package

React library for selecting, editing and compressing images in the web browser. You can apply filters, change formats, resize and compress the image.

react-basic-stepper

npm package

The react-basic-stepper provide a two component to recreate a wizard-like workflow by dividing content into logical steps.

react-hook-modal

npm package

A custom modal, with a custom hook for handling modals in React applications. This package allows us to centralize the logic for rendering modal components.

LANGUAGES

Spanish



English

