Andrés Barón

af.baron10@uniandes.edu.co | +57 315 410 8004 | https://www.linkedin.com/in/andrés-barón-sandoval-76ab96186/?locale=en_US

EDUCATION

UNIVERSIDAD DE LOS ANDES
MS.c in Computer Software Engineering
Jun 2023 | Bogotá, CO

UNIVERSIDAD DE LOS ANDES
Diploma in Principles of Agile and Automated Software Engineering
Jun 2021 | Bogotá, CO

DIGITAL HOUSE CODING SCHOOL
Java Coding Bootcamp
Apr 2021 | Buenos Aires, AR

UNIVERSIDAD DE LA SABANA
Diploma in Big data and Business analytics
Nov 2020 | Bogotá, CO

UNIVERSIDAD DE LOS ANDES
BS in Mechanical Engineering
Oct 2020 | Bogotá, CO

SKILLS

TECHNICAL SKILLS
Proficient with:
- **Languagues:** Golang, C++, Java, JavaScript (including ES6+), HTML5, CSS3, SQL, C#, Python, RStudio, Visual Basic, Mathlab, OCaml.
- **Frameworks:** React js, Angular, Vue js, Bootstrap, Flask, Springboot, Django.
- **Technologies:** JQuery, Git (Git-Flow)/GitHub, AJAX, Nginx, Apache, WordPress, ElasticSearch. Kubernetes, Docker

SOFT SKILLS
Outstanding at:
- Creativity and innovation.
- Excellent personal relationships and teamwork.
- Complementary studies in English and German.

CERTIFICATIONS & COURSES

- **AWS Certified Solutions Architect**
  Amazon
- **AWS Cloud Practitioner Certification**
  Amazon
- **Structuring Machine Learning Projects**
  Deep Learning.Ai
- **Improving Deep Neuronal Networks: Hyperparameter tuning, Regularization and Optimization**
  Deep Learning.Ai
- **Architecting with Google Kubernetes Engine**
  Google
- **Google Cloud Platform Fundamentals: Core Infraestructure**
  Google
- **Google Cloud Plataform Big data and Machine Learning fundamentals**
  Google
- **Structure of computer Networks**
  Google

AWARDS

Year	Place	Description
2021	1st Place	Coding competition (IEEE 2021-2)	Universidad Central
2013	2nd Place	Augustinian schools programming tournament
2013	1st Place	Best student graduated

EXPERIENCE

RAPPI, **Senior Software Engineer IV**
May 2022- Apr 2023
- Improved response times and latency in the primary application responsible for managing supermarket products, reducing response time from 600 ms to 200 ms.
- Conducted experimental development in productive environments using GraphQL to implement performance improvements in the central infrastructure of the area.
- Created an EDA architecture for managing complex queries to databases. The design architecture was capable of handling more than 1,000,000 events per day associated with in-app purchases with scope in 9 countries.

RAPPI, **Senior Software Engineer III**
May 2022- Apr 2023
- Developed a paging algorithm for offer corridors in the application, reducing CPU usage on Elastic Search cluster and avoiding crashes in productive regions.
- Created a distributed navigation tree to improve navigation and efficient information retrieval from databases for supermarket corridors in the application.
- Implemented Jenkins pipeline scripts and continuous integration in Tier 1 microservices within the Core area.

UNIVERSIDAD DE LOS ANDES, **Instructor Cloud native App Development**
Sept 2022-Dec 2022
- Designed "Development of Native Applications in the Cloud" course for master's students, covering Kubernetes, microservices, BDD, and serverless computing.
- Taught microservices design patterns with real-world industry scenarios, quantifying their impacts on performance, quality, and budget in software production.

MERCADOLIBRE, **Backend Software Analyst**
Apr 2021-May-2022
- Unified machine learning models and software architecture for daily e-commerce operations generating around $10k.
- Developed the Experimental Viewer for real-time product visualization and AI experiment monitoring, improving the capabilities of the Machine Learning department.
- Implemented APIs to scale the recommendation service for approximately 74.2 million mobile/web app users.

SERLEFIN BPO & O, **Software Engineer II**
Nov 2020-March-2021
- Developed the PCC mailing platform using Java, Bootstrap, and Angular 11, resulting in an efficient and secure application with around 2000 daily users and improving CSAT from 3.2 to 4.1.
- Designed the frontend and backend of the Enterprise Resource Planning portal using Vue JS and C#, which unified all financial systems of the company and was utilized by about 6 departments.

SERLEFIN BPO & O, **Software Engineer I**
Apr 2020 -Nov 2020
- Created AI-powered robots to improve call center contactability, generating over 5000 USD/month in customer payments.
- Automated financial portals with Javascript, C#, and Tampermonkey, enhancing customer experience.
- Developed APIs for human resources and telecommunications divisions, processing 300 daily datasets for operational analysis using MVC and Entity Framework.

PUBLICATIONS

- **Optimizing Database Performance: Exploring Indexing Techniques in DBMS**
  Dev.to
  Academic article that explaining indexing techniques and their role in enhancing database management systems (DBMS) in software systems.

- **Finding strongly connected components (SCC) in directed graphs: Kosaraju-Sharir vs Tarjan's algorithm in Go**
  Medium
  Academic article that explains the principal algorithms used to find SCCs on directed graphs. Analyzed their time complexity by coding benchmarks in Golang.

- **Design patterns in microservices**
  Medium
  Academic article explaining scaling and resilience techniques in microservices, exposing good practices and strategies used in the industry.

- **Artificial intelligence Among us**
  El Espectador
  Article published in the newspaper El Espectador, about the importance of artificial intelligence in our society and how it is affecting it in a positive way.