

Luis Fernando Núñez Rangel

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Profile

Innovative and results-driven Software Engineering Lead with over 3 years of experience leading software development teams and delivering scalable, high-impact solutions in fintech, aerospace, and automotive industries. Skilled in agile methodologies, software architecture, cloud computing, and automation. Adept at driving cross-functional collaboration to meet business objectives and enhance operational efficiency.

Professional Experience

Lead Software Development Engineer

Cardic Automotriz – Mexico City, Mexico

March 2025 – Present (3 months)

- Lead software division managing the development, deployment, and maintenance of custom ERP systems tailored to automotive operations.
- Designed and implemented a fully integrated ERP system improving inventory, sales, billing, customer service, and logistics management.
- Automated workflows using Python, built RESTful APIs, and led agile development teams (Scrum/Kanban).
- Defined architecture and CI/CD pipelines ensuring system scalability and data integrity.

Technologies: Python, REST APIs, Agile (Scrum/Kanban), AWS, Java, Spring Framework

Software Engineering Lead

Antares Aerospace Mx – Mexico City, Mexico

September 2023 – February 2025 (1 year 5 months)

- Architected scalable software infrastructure and RESTful APIs for aerospace mission control and analysis systems.
- Led cross-functional teams ensuring code quality and timely delivery of aerospace software solutions.
- Implemented real-time monitoring tools and integrated telemetry data management.

Technologies: REST, Software Architecture, Team Leadership

Aerospace Engineer

Antares Aerospace Mx – Mexico City, Mexico

March 2023 – February 2025 (1 years 5 months, part-time)

- Collaborated on design and validation of payload deployment and recovery systems using ANSYS.
- Performed geometric dimensioning, tolerance analysis, and technical documentation for aerospace components.

Technologies: ANSYS, CAD, Structural Simulation

Software Developer

Antares Aerospace Mx – Mexico City, Mexico

April 2023 – January 2024 (10 months, part-time)

- Developed ground control systems for telemetry visualization and engine test automation.
- Enhanced decision-making through real-time data management.

Research Intern

BEIFI Program, IPN – Mexico City, Mexico

February 2023 – March 2024 (1 year 2 months)

- Developed control algorithms for UAVs and mobile robotics under uncertain environments.
- Designed prototype robotic arm with Intel RealSense camera for 3D environment mapping.

Technologies: Python, Computer Vision, AI, Robotics

Game Developer Intern

Imagination Wizards – Mexico City, Mexico (Remote)

December 2022 – February 2023 (3 months)

- Developed core gameplay algorithms and optimized 2D games for Android.
- Participated in Scrum sprint cycles and collaborated remotely with designers and artists.

Technologies: C#, Unity, Agile (Scrum)

Education

Universidad Nacional Autonoma de Mexico | Facultad de Ciencias (UNAM)

Bachelor's Degree in Physics

In Progress – Mexico City, Mexico

- Proficient in modeling physical systems and simulating advanced phenomena using **numerical methods**, **differential equations**, and **statistical mechanics**.
- Developed and simulated physical systems using Linux-based tools (e.g., **Python**, **Matplotlib**, **SciPy**, **Gnuplot**, **Bash scripting**).
- Strong mathematical foundation applied to algorithm optimization, control systems, and predictive modeling.

Instituto Politécnico Nacional (IPN)

Bachelor's Degree in Aeronautical Engineering

In Progress – Mexico City, Mexico

- Specialized in aerospace software and control systems.
- Represented Antares Aerospace as a featured speaker at **FAMEX 2023**, delivering a conference on the software stack used in aerospace testing and recovery systems.
- Delivered a lecture at **ESCOM IPN** about the application of computational systems in real aerospace missions and embedded design.

Colegio de Estudios Científicos y Tecnológicos del Estado de México (CECyTEM)

Technical Baccalaureate – Information Technology and Computing

State of Mexico, Mexico

- Conducted hardware-level support and network diagnostics, including firewall configuration and secure Wi-Fi deployments.
- Developed early-stage web applications and managed Linux-based server environments for hosting internal tools.

Skills

- Programming Languages: Python, Java, C#, C, C++, JavaScript
- Frameworks/Technologies: Spring Framework, RESTful APIs, AWS, Jupyter Notebook
- Tools: ANSYS, Agile methodologies (Scrum/Kanban), CI/CD pipelines
- Other: Software Architecture, Team Leadership, Automation, Computer Vision, Robotics