IVAN PEDROZA

Seattle, WA 98107 (208) 590-5361
Ivan.k.pedroza@gmail.com github.com/IvanPedroza linkedin.com/in/ipedroza

SOFTWARE ENGINEER

Experienced software engineer with extensive project management experience, specializing in technical problem-solving, performance optimization, and backend systems development.

EDUCATION

Master of Science (M.S.), Computer Science
Northeastern University

CORE COMPETENCIES

Process Automation| Distributed Systems | Performance Optimization | Project Management | CD/CI

TECHNICAL SKILLS

Python | Java | JavaScript| SQL | NodeJS | API Development | AWS | React | Docker | Version Control

EXPERIENCE

SIERA SOLUTIONS, Antwerp, BE
Software Development Engineer, October 2023 – Present
Architected custom software solutions focusing on the development of scalable backend services for startups.

- Led the development of RESTful APIs, ensuring robust testing and validation to meet quality standards.
- Collaborated in managing software development lifecycle, from initial design to deployment and maintenance.
- Employed technologies such as Node.js, Express, and Docker and AWS to develop systems that support data management and process automation.
- Deployed CD/CI pipelines using GitHub Actions and Docker, automating build, test, and deployment processes to ensure rapid and reliable software delivery.

NANOSTRING TECHNOLOGIES, Seattle, WA
Bioinformaticist (Data Scientist), May 2021 – October 2023
Developed and managed a bioinformatics pipeline, overseeing research project lifecycles.

- Utilized SQL and Python to develop a bioinformatics pipeline that queried public databases for gene expression data, cutting NanoString probe design time by 20%.
- Deployed a scalable microservices infrastructure on AWS using Java servlets to process hundreds of daily customer requests.
- Collaborated across teams on data mining projects to enhance RNA probe performance.
- Managed customer-facing projects, customizing experimental designs with NanoString platforms.

Research Associate II, March 2019 – May 2021
Engineered and tested products while developing software for RNA probe manufacturing.

- Identified infrastructure gaps and developed electronic batch record solutions using the .NET framework, streamlining manufacturing of RNA probes, and reducing manufacturing time by 35%.
- Built a Lab Inventory Management System (LIMS) to improve product quality and profitability, significantly boosting workflow efficiency and reducing consumables operational loss by 6%.
- Authored Standard Operating Procedures and executed validation protocols to comply with cGMP regulations.

U.S. Army Combat Engineer, Joint Base Lewis-McChord August 2011 – December 2014
Supported engineering operations, including demolitions, route clearance, and fortifications.

- Led teams in route clearance operations, successfully enhancing the safety and mobility of military units through strategic planning and risk assessment, while fostering teamwork and leadership in high-pressure environments.

PUBLICATIONS

R-loop formation by dCas9 is mutagenic in Saccharomyces cerevisiae March 2019
Nucleic Acids Res. Laughery, M.F., Mayes, H.C., Pedroza, I.K., Wyrick, J.J.