

Gildardo Martinez

San Diego, CA | [linkedin.com/in/gil-martinez-phys](https://www.linkedin.com/in/gil-martinez-phys) | github.com/gildigital
USAF Veteran 2018

EDUCATION

University of San Diego BS in Physics Overall GPA: 3.29	January 2025
San Diego Miramar College AA in Mathematics	August 2022
Community College of the Air Force AS in Aircraft Metals Technology	May 2017

ENGINEERING EXPERIENCE

Software Engineer <i>LeetPhys, Inc.</i> San Diego, CA	March 2025 – Present
<ul style="list-style-type: none">Developed full-stack web app with React, Node.js, TypeScript, and PostgreSQL, serving ~1000 active usersBuilt secure REST APIs, authentication systems, and real-time analytics dashboards using JavaScript and TypeScriptIntegrated Stripe for payments, Brevo for email, and Zapier for automation, streamlining SaaS workflowsImplemented A/B testing, conversion tracking, and Google One-Click Signup, increased user signups by 400%Configured CI/CD pipelines, preview environments, and serverless deployment with Vercel and GitHub ActionsManaged end-to-end development using Linux and terminal-based tools for efficient workflows	
Research Assistant <i>University of San Diego</i> San Diego, CA	September 2024 – December 2024
<ul style="list-style-type: none">Built Fourier Light Field Microscope (FLFM) for 3D imaging, integrating hardware and software solutionsDeveloped Python-based data analysis tools using object-oriented programming, Git, and modular designCreated front-end visualizations with back-end Fourier transform logic to analyze 3D motion dataDesigned scalable data processing pipelines, accelerating analysis by 25% using agile practicesDocumented code, workflows, and test protocols, ensuring reproducibility for team collaboration	
Software Engineer <i>Amazon Web Services</i> Seattle, WA	May 2024 – August 2024
<ul style="list-style-type: none">Developed Java applications with DynamoDB to balance data across distributed storage racks, eliminating bottlenecks and boosting throughput for real-time systemsBuilt rate-limiting permit mechanism using DynamoDB, preventing overflow in high-throughput operationsCreated AWS CloudWatch dashboards to monitor metrics, improving system observabilityWrote CI/CD pipelines and unit tests with TestNG and Mockito, achieving 90% code coverageContributed to RESTful backend architecture using Java, Git, and agile practices (sprints, code reviews)Documented project designs and workflows, supporting team collaboration and AWS best practices	
Research Assistant <i>University of San Diego</i> San Diego, CA	January 2023 – May 2024
<ul style="list-style-type: none">Developed ML tools with PyTorch and CNNs for image analysis, reducing data needs by 99% using Fourier transformsBuilt modular Python applications with OOP, NumPy, PyTorch, and Matplotlib, using Git for team collaborationCreated data pipelines with front-end visualizations and back-end processing to deliver scientific insightsAuthored first-author paper on ML tools, compiling two years of work, published in Soft MatterPresented findings at APS 2024, explaining code and models in clear, actionable terms	
Aircraft Metals Technician <i>U.S. Air Force</i> Whiteman AFB	February 2015 – December 2018
<ul style="list-style-type: none">Collaborated in high-pressure teams to maintain aircraft systems, ensuring mission-critical safety and precisionSolved complex technical issues under tight deadlines, developing resilience and attention to detail	

ENGINEERING PROJECTS

Full-Stack Job Application System San Diego, CA	April 2025 – Present
<ul style="list-style-type: none">Developed full-stack job application platform with React, TypeScript, Node.js, and PostgreSQL, featuring AI-driven resume matchingBuilt Node.js backend with Express, creating REST API endpoints for web scraping, form processing, and real-time updates via Server-Sent EventsCreated Playwright scripts with AI Vision for web-object detection and form automation, integrating OpenAI and Claude APIs for dynamic content generationDesigned user dashboard with React and Recharts to track application statuses and personalized metricsDeployed backend and Playwright workers using Docker on Railway, ensuring scalable performance	

SKILLS

Languages: JavaScript, TypeScript, Python, Java | **Frameworks:** React, Node.js, Express, Next.js | **Tools:** AWS (DynamoDB, CloudWatch), PostgreSQL, Playwright, Docker, Git, Vercel, Railway | **Libraries:** PyTorch, NumPy, Matplotlib | **Practices:** Agile, CI/CD, REST APIs, OOP