Andrés Barrera

Austin, US • Willing to Relocate Domestic or Abroad
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Multidisciplinary Software Engineer, Product Designer, and Community Leader with 7+ years of experience architecting full-stack systems, leading product development teams, and scaling impactful tech solutions across startups, mid-sized companies, and nonprofit sectors. Proven track record of delivering scalable applications in cloud-native environments using modern languages & frameworks like React, Golang, and Python, with deep fluency in containerization, AI integration, and telemetry. Fluent in both English and Spanish.

Technical Skills

Programming Languages	JavaScript / TypeScript, Python, Go, C/C++, SQL
Frameworks & Tools	React, Express.js, Amazon Web Services (Lambda, DynamoDB, RDS, EC2, ECS, SNS, & IAM), Docker, Kubernetes, Grafana, Prometheus, Selenium, Puppeteer, Flutter
Design & Marketing	Figma, Adobe Photoshop, Adobe Illustrator, Webflow, WordPress, Semrush
Artificial Intelligence	Mistral 7B, Hugging Face Transformers, LLM APIs (OpenAI, Gemini), Cursor, Google ML Kit, Tesseract OCR, PyTorch

Professional Experience

Senior Software Engineer, Owner
January 2024 - Present
CircleSquare Labs | Austin, US | www.circlesquarelabs.com — React, Golang, AWS, Docker, Supabase, Puppeteer, Leadership
- Leading a full-stack technology firm with 4+ custom solutions and a community of contractors to execute client projects.
- Built a project management dashboard with Stripe payments and custom AWS SES / SNS e-mail client for system-wide notifications.
- Developed OCR and search optimization AI systems capable of effectively interpreting data on a spatial and contextual level.

President, Software Engineer
May 2023 - Present
Hispanic Hackers | Austin, US | www.hispanichackers.org — Next.js, React, TailwindCSS, Figma, Non-Profit Leadership
- Scaled a community of Latino/Hispanic technologists by 150+ new members annually, growing to 2,700+ total members.
- Established the organization's 501(c)(3) status, securing its legal and operational foundation.
- Produced & directed 45+ community events to date, resulting in increased access to resources for underrepresented technologists.

Computer Coding Instructor (Part-Time)
September 2024 - June 2025
Premier High School / CodeStream Studios | Austin, US — Python, Leadership, Instruction
- Taught Python Programming classes at Premier High School, providing instruction & mentorship to 13 students over a school year.
- Developed curriculum, secured and implemented IEP accommodations, and prepared students for Python certification.
- Assessed the previous year's programming curriculum and identified key strengths and weaknesses from multiple user perspectives.

Senior Software Engineer (Contract)
December 2023 - August 2024
Digital Dating Safety Startup | Austin, US — Angular, AWS EC2, MySQL, Java Spring, Flutter
- Conducted strategic technical audits - including a comprehensive tech stack and risk analysis for a high-stakes partnership - shaping executive decisions around scalability and resource allocation.
- Automated user registration and contest tracking with an API and dashboard application, significantly improving data reliability.
- Executed web hosting migration and SEO, improving load times and uptime while reducing infrastructure maintenance overhead.

Software Engineer
June 2022 - July 2023
Naval Defense Agency | Austin, US — C++, Go, RTI DDS, Docker, Kubernetes, Prometheus, Grafana
- Developed and deployed microservice-based DoD systems using Golang, C++, RTI DDS, & Docker for mission-critical applications.
- Enhanced testing coverage (including edge cases), real-world simulation environments, and integrated DevSecOps practices.
- Designed and integrated electrical systems for prototype vehicles, including CANBUS, rotary encoders, and peripheral interfacing.

Frontend Engineer (Contract)
August 2021 - July 2022
Drone Media Startup | Colorado Springs, US — JavaScript, Python, Final Cut Pro, Photoshop
- Designed interactive media and web content using code-based tools, while supporting business planning and strategies.

Engineering Intern
August 2020 - December 2020
Industrial Inspection Company | San Antonio, US — C++, Python, MATLAB
- Developed prototypes & firmware for high voltage systems and assessed integrity at sites like Asarco Silverbell and Exxon/Arcadis.

Education

Bachelor of Science in Computer Engineering
2022
Purdue University | Indiana, US — Artificial Intelligence, Microelectronics, and Software Architecture