

Karim Smires

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EDUCATION

Rutgers University, School of Engineering | Piscataway, NJ

M.S., Machine Learning (GPA: 3.50)

Sept 2025 – May 2027 (expected)

B.S., Electrical & Computer Engineering (GPA: 3.66), Summa Cum Laude, Dean's List (5×)

Sept 2021 – May 2025

PROFESSIONAL EXPERIENCE

Guild | Associate Software Engineer, Coverage Squad | Denver, CO (Remote)

Aug 2026 – Present

Software Engineering Intern, Benefits Administration (converted to full-time)

Jun 2026 – Aug 2026

- Designed and shipped a production backend-for-frontend service from an empty repository: Python 3.13 on AWS (Lambda, API Gateway, CDK/SAM), a three-repo Auth0 M2M auth chain, canary CI/CD, Datadog observability, and Tier 0 compliance. 532 tests at 98.6% coverage; ~3K production requests served with zero 5XX errors across 3 consumers. Built the XOB Determination UI in Coverage Lookup on top of it
- Shipped 6 MCP tools to Guild's production AI gateway by extracting a protocol-neutral service layer, so support staff investigate member eligibility in natural language instead of hand-querying S3, Snowflake, and DynamoDB. Logged 1,146 calls from 31 users (100% success) in the first two weeks across 30 employer accounts, then led a follow-up epic fixing 11 request-handling defects and hardening the surface to 24 tools
- Built Wells, a Slack AI investigation agent (TypeScript, Bolt, ECS Fargate), taking it from an empty repository to use on a live production escalation in 2 days. Piloted by a second business function within a week and listed in Guild's company-wide agent index; extended with a chained deep-investigation mode and a 55-case evaluation harness (319 tests)
- Root-caused a live member escalation to a systemic split-recipient identity defect. The resulting platform sweep reconciled 762K recipient records, surfaced 1,031 orphaned authorizations, and unblocked 5 affected members before any of them escalated; closed as a repeatable playbook
- Removed a critical remote-code-execution vulnerability from a production container image, caught a PII log egress in pre-merge review of my own branch, and root-caused a silent serialization defect behind 92K production errors that three observability layers had missed
- Eliminated an IAM role leak that had made the squad Guild's largest staging IAM consumer: fixed the CDK root cause, reclaimed 373 orphaned roles with a dry-run-first nightly GitHub Action, and published the fix org-wide (a second squad adopted it the same day)
- Merged 70 PRs (+69K lines, 11 repos), closed 77 Jira tickets and 5 self-owned epics, triaged 4 production incidents, delivered a second production service (catalog-builder-api) on loan to another org, mentored a fellow intern, and wrote 5 Confluence guides including the squad's AI tooling operating guide

Charge Anywhere | Software Engineering Intern | Piscataway, NJ

Jun 2024 – Aug 2024

- Developed a full-stack e-commerce platform (Node.js, Python, C#) with JSON-driven menu management, secure payment gateways supporting credit card and cryptocurrency (XLM, ETH) transactions, responsive JavaScript UIs, and an integrated AI chatbot assistant

Rutgers University | Student Worker: Tutor & Grader | Piscataway, NJ

Oct 2023 – Present

- Tutored 100+ students in introductory computer engineering and STEM courses; graded for multiple engineering courses in collaboration with professors and TAs

PROJECTS & PUBLICATIONS

GENV: The Global Environment Manager | Open Source, Go

Mar 2026 – Present

- Lead developer of a cross-platform environment manager (v4.7.4) that reproduces software environments on macOS, Windows, Linux, and WSL2 from one git-friendly spec over existing package managers; shipped via Homebrew, AUR, and Scoop

PeaProxy | Open Source, Go

Sep 2026 – Present

- Built a local multi-provider AI gateway (v3.1.1) with OpenAI- and Claude-compatible endpoints over API-key, local, and OAuth providers, a live model catalog, 429/401 failover, OS-keychain secrets, a CLI, and a browser UI

CWC Health App | Rutgers BHEI, Flutter/Dart

Aug 2026 – Present

- Built a privacy-first Android/iOS pilot app (v1.0.0) for CSPNJ Community Wellness Centers: OpenStreetMap nearby services, on-device health records, one-tap crisis contacts, no accounts or analytics; CI gates every PR
- Paper submitted to IEEE HMSS 2026: *Co-Designing a Privacy-Preserving Mobile Health-Navigation Platform for Community-Based Health and Wellness*

DrinkSync: A Sustainable Hydration Tracking System | IEEE Publication

Feb 2026

- Co-authored a published IEEE paper on a low-cost IoT smart coaster ([code](#)); built Raspberry Pi sip detection (HX711, MPU6050) streaming over Bluetooth RFCOMM to a Kotlin Android app with goals and streaks

SKILLS

Languages: Python, TypeScript/JavaScript, Go, Java, Kotlin, C/C++, C#, Swift, Rust, SQL, MATLAB, Verilog

Cloud & Infrastructure: AWS (Lambda, API Gateway, CDK, SAM, Aurora, DynamoDB, S3, IAM, Route53, CloudWatch), Docker, GitHub Actions, Datadog, Auth0, Snowflake, MCP servers

AI/ML: PyTorch, TensorFlow, Hugging Face, OpenCV, CUDA, Pandas, NumPy; LLMs, NLP, computer vision, reinforcement learning