

BRANDON ARON

Product Engineer · Applied AI · Bucharest / Remote EMEA

brandon.aron38@gmail.com · +40 773 935 280 · mikoshi.studio · github.com/Brandon1138

Full-stack product engineer who ships production systems end-to-end — typed frontends and backends, agentic AI tooling, and applied security. Sole engineer behind a production-ready commercial client platform. MSc AI & Data Science (in progress); BSc CS with a post-quantum cryptography thesis and co-authored ML research. Ship-oriented, systems-aware, design-led.

EXPERIENCE

Independent Product Engineer · Mikoshi Studio · 2024 – present

- Sole designer and full-stack engineer for **iPhoneDoctor** (ironkasa.xyz) — production-ready commercial platform built for a Bucharest Apple-repair business: public marketing site, booking flows, inventory, CRM and back-office.
- Owned the full lifecycle solo: UX/UI design, frontend, backend, deployment, observability (Sentry), analytics (GA4), security hardening (Turnstile, CSP, rate limiting), structured SEO / JSON-LD.
- Built around real business constraints: device/service taxonomy, customer intake, internal repair operations, SEO-preserving migration, mobile performance, conversion-focused UX.
- Performance-tuned the deployed platform for mobile UX and conversion: Semrush mobile Core Web Vitals 100 (10/10 routes green, CLS 0.000); Lighthouse mobile performance 94–97.

Next.js · TypeScript · Supabase · Postgres · Vercel · Sentry · Cloudflare Turnstile · Upstash

SELECTED PROJECTS

Keystone · github.com/Brandon1138/keystone · 2025 – present

- Desktop workbench for benchmarking classical and post-quantum cryptography (Kyber / ML-KEM, Dilithium / ML-DSA) and hybrid encryption workflows. Native C++ performance layer behind an Electron / TypeScript interface; high-resolution native timing and runtime metrics. Technical foundation of BSc thesis.
- Reproducible benchmark runs across key generation, encapsulation/decapsulation, and signing, with runtime and memory analysis, result visualisation, and quantum-algorithm experimentation via IBM Quantum tooling.

C++ · Electron · TypeScript · Node · Python · OpenSSL / libOQS · IBM Quantum

Soma · mikoshi.studio/cases/soma · 2026 – present

- Healthcare workflow platform built on strict Clean Architecture — patient/workflow domain modelling, typed application use-cases, and agent-assisted clinician operations.
- Strict separation of domain, application, infrastructure, and interface layers with enforced dependency rules — clinical scheduling, patient intake, and operational flows modelled as typed use-cases.

Next.js · TypeScript · Postgres · DDD / Clean Architecture · AI agents

RESEARCH

Co-authored research — genetic-algorithm cryptanalysis of Romanian monoalphabetic substitution ciphers using n-gram fitness scoring. Related work presented at the Universitatea Titu Maiorescu Student Scientific Communications Session, May 2026; manuscript in preparation for submission.

EDUCATION

MSc Artificial Intelligence & Data Science — Universitatea Titu Maiorescu · 2025 – 2027 (Y1 in progress)

BSc Computer Science — Universitatea Titu Maiorescu · 2022 – 2025 · Thesis: post-quantum cryptography benchmarking (Keystone)

STACK

Web / product TypeScript · React · Next.js · Tailwind · Node.js · Postgres · Supabase · Vercel

AI / agents Agent workflow design · permissioned tool access · ML fundamentals · Python for data workflows

Systems / security C++ · Python · Electron · OpenSSL / libOQS · post-quantum crypto · CSP / security headers

Tooling / craft Sentry · GA4 · GitHub Actions · Figma

Languages Romanian (native) · English (C2) · French / Spanish (B1 / B2)