Rareș-Ștefan Asaftei

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Education

Faculty of Automatic Control and Computer Engineering — Iasi, Romania
Master of Science - Cyberspace Security — Sep 2026 — June 2028

Faculty of Automatic Control and Computer Engineering — Iasi, Romania
Bachelor of Computer Engineering - Software Engineering — Sep 2022 — June 2026

Experience

AUMOVIO — Sep 2025 — June 2026
Software Engineer — *Iasi, Romania*

- Collaborated with 3 senior engineers to migrate **15K LOC** C++ legacy code to .NET Core, **deployed to production**
- Redesigned two hardware drivers improving response time by **15%** in microservices architecture
- Implemented gRPC-based communication between microservices for scalable interactions

Continental — July 2025 — Sep 2025
System Test Intern — *Iasi, Romania*

- Contributed to automated test scripts improving coverage from **70% to 85%** and reducing manual testing by **30%**
- Documented **20+** bugs with reproducible steps, speeding up developer fixes
- Joined sprint reviews and stand-ups with a cross-functional team, aligning test priorities with dev milestones

Open Source

hickory-dns | Rust — github

- Fixed an RFC 1035 violation by rejecting zero-length TXT records in construction and zone-file parsing - **PR #4068**
- Backported the fix to the `release/0.26` branch at the maintainers' request - **PR #4069**

simple_socks5 | Rust — github

- Async SOCKS5 proxy library with RFC 1928/1929 compliance, published on crates.io (**800+ downloads**)

r2048 | Rust — github

- Terminal 2048 game with ratatui and SQLite scores, published on crates.io

Projects

nopanic | Rust — github

- Engineered an **onion routing network** with layered encryption, **X25519** key exchange, and a microservices architecture
- Designed a fixed-size 514-byte wire protocol with per-circuit SHA-256 integrity checks to resist traffic analysis
- Deployed **11 Docker containers** on DigitalOcean behind Caddy with TLS 1.3

CargoTicket | Rust — github

- Built event ticketing platform with microservices using **REST, gRPC, and WebSockets** for real-time notifications
- Secured services with JWT-based authentication and role-based access control
- Implemented **event-driven architecture** with **RabbitMQ** for async refund processing and message broadcasting
- Deployed containerized services with observability stack (Prometheus/Grafana) for performance analysis

rs-chat | Rust — github

- Developed async TCP chat server using Tokio and broadcast channels
- Implemented concurrent username validation achieving collision detection
- Wrote a Bash client script that detects the system package manager and installs missing dependencies

Technical Skills

Languages	Rust, Go, C++, Python, Java, .NET, Bash
Data & Messaging	PostgreSQL, Redis, MongoDB, RabbitMQ, Kafka
Infra & Protocols	gRPC, REST, JWT, Microservices, Event-Driven Architecture
Systems & Networking	Linux, TCP/IP, DNS, TLS, SOCKS5, Async I/O
Tools	Docker, Git, GitHub Actions, Prometheus, Grafana, Caddy, Make