Viktor Sharha

Computer Science Student — AI & Full-Stack

contact@viktorsharha.com | linkedin.com/in/vsharha | github.com/vsharha | viktorsharha.com

Education

The University of Edinburgh — Edinburgh, Scotland

BEng Computer Science, Penultimate Year — Sep 2024 – May 2028 (Expected)

- **Selected marks:** Introduction to Computation (**100%**), Object-Oriented Programming (**92%**), Introduction to Algorithms & Data Structures (**72%**), Reasoning & Agents (**72%**)

Experience

The University of Edinburgh, Information Services Group — Edinburgh, Scotland

AI and UX Innovation Intern (Part-Time) — Sep 2026 – Present

- Designed a new AI style-guide checker prototype for the University's web editors after the previous intern's prototype showed alert overload in usability testing (166 alerts on one page), splitting it into a site-wide report and an in-editor panel
- Started with the style guide's link rules, testing them on a University website's 1,890 pages after false positives broke editors' trust in earlier sessions, and reserved must-fix status for checks that flagged only real breaches (**400+** links)
- Ran **10 simulated usability sessions** on design mockups with AI agents acting as web editors, reshaping the panel's alert counts, wording and record of reviewed alerts before user testing

Web Development Migration Intern — Jun 2026 – Aug 2026

- Built a migration tool that converted **410 of 420** targeted legacy pages (97.6%) with no detected unconverted components, on a copy of the production database; a dedicated team took over its development
- Rewrote an inherited regex prototype as a Drupal module that parses page structure, preserving nesting and media
- Made every conversion land as an unpublished draft for an editor to approve, with pre-write checks and **158 automated tests**

VDrive Car Servicing & Diagnostics — Edinburgh, Scotland

Software Engineer, Full Stack & Automation — Jun 2025 – Present

- Cut monthly bookkeeping from **15 hours** to **under 30 minutes** for a car servicing business by automating job recording, accounting, and AI invoice intake (**850+ invoices/year**)
- Replaced a paper workflow with a Telegram operations platform where mechanics manage jobs, perform DVLA lookups, and draft bookings from voice notes using LLM extraction
- Recovered **200+** job records from 8 months of handwritten notes using two-stage LLM extraction and payment matching

Technical Projects

Sentinel | *TypeScript, SvelteKit, Apertus LLM* — Jun 2026

SwissHacks 2026, AMINA Bank challenge (40 hrs, team of 5): live-data KYC-drift monitor for a bank's customer book

- Architected and built a **cost-aware screening cascade** that scores every customer with cheap rules and escalates only drifting profiles to LLM review
- Built the live data connectors (news, SEC filings, regulator actions) and the **ownership graph**, which traces hidden multi-hop exposure to sanctioned entities

Zenparse | *Node.js, TypeScript, Zod* — Feb 2026

3rd place at Launchburgh demo day: document extraction framework with multi-pass LLM pipelines and multi-provider support

- Shipped document extraction to **production** at over **90%** record-level accuracy on invoices, handling PDF, image, CSV, and XLSX inputs and isolating failures so one bad item cannot abort the batch
- Made fields, validation rules, and prompt context configurable without code via type-validated schemas built at runtime

Self-Hosted Infrastructure | *Ansible, Podman, systemd, Tailscale, restic* — Jul 2026 – Present

Self-hosted family photo backup and other services across a home server and public VPS for three households

- Isolated 11 application stacks under separate Linux accounts running rootless Podman, with startup blocked until required storage is mounted and secrets are prepared
- Built encrypted backups with a monthly restore rehearsal proving keys still decrypt the data, and alerts on stalled runs

Samantha OS Assistant | *Python, Qwen3-Coder, Docker, Linux* — Oct 2025

1st place at OpenEuler Challenge: natural language CLI assistant for Linux system operations

- Built an LLM command loop with structured JSON actions, confirmation for destructive commands, and failure resets

Open Source

- **Linux kernel** (HID subsystem): Fixed a wireless keyboard receiver stalling after profile switches; applied by the maintainer
- **VS Code GitHub Pull Requests extension** (Microsoft, **37M+ installs**): Fixed merge status stuck on "Checking" forever
- **Faugus Launcher** (Linux game launcher, **2,600+ stars**): Fixed games failing to launch after Steam overwrote Proton installs

Technical Skills

Languages: Python, TypeScript, JavaScript, Java, C++, PHP, SQL, Bash
Web, Backend & Cloud: Node.js, React, Next.js, SvelteKit, FastAPI, PostgreSQL, Redis, Cloudflare Workers
AI & Automation: LLM pipelines, agent design, structured output, prompt engineering
Infrastructure & Testing: Git, Linux, Ansible, Docker, Podman, systemd, GitHub Actions, Vitest, Playwright