Vlad Posmangiu Luchian | CV

I am an adaptable senior software engineer with experience across financial technology, banking, Web3, and architecture. With a proven track record of delivering robust, scalable solutions to complex business problems, I excel in both front-end and back-end development, focusing on high-quality, test-driven, maintainable code.

My passion spans functional programming, compilers, reinforcement learning, distributed systems architecture, and low-level programming. I constantly explore the intersection of mathematics, data, and our understanding of the world while remaining committed to continuous learning and applying appropriate technologies to solve real-world business challenges.

Contact Details	
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GitHub	github.com/cstml
Location	Bath/London, UK
Nationality	British/Romanian
LinkedIn	linkedin.com/in/vladluchian/

▸ Professional Experience

• Senior Software Engineer | Griffin Bank

2023 - Present | London, UK

Stack: Clojure, Clojurescript, FoundationDB, Datalog, Bazel, K8s

I was a senior software engineer on the Onboarding and Financial Crime team at the "UKs first fullstack API driven platform bank", where I developed and maintained mission-critical banking software in a highly regulated environment. I specialised in transaction monitoring, fraud detection, client onboarding processes, and compliance systems, bringing proficiency in both front-end and back-end development. My focus was on creating scalable, resilient systems that meet strict regulatory requirements while optimising operational efficiency. My responsibilities extended to collaborating closely with compliance and business stakeholders, and delivering features that strike the perfect balance between technical excellence and commercial objectives.

Key Contributions:

- Designed and implemented the bank's Transaction Monitoring system, including rules engine, detection algorithms, and reporting capabilities, allowing the bank to exit the mobilisation phase and fully launch as a licensed bank
- Led cross-functional initiatives to improve Straight Through Processing rates for onboarding, significantly reducing operating costs and improving customer experience
- Designed and built real-time integration systems with third-party services and regulatory APIs, ensuring data consistency and system reliability
- Developed a high-performance Companies House Caching service that improved system responsiveness
- Optimised database queries and API performance across multiple systems
- Collaborated with UX designers to enhance Operations and Client web applications, focusing on usability and efficient workflows
- Improved and scaled the bank's onboarding engine, developing onboarding flows, and various features

• Software Engineer & Engineering Lead | MLabs

2021 - 2023 | London, UK

Stack: Haskell, Rust, Purescript, Nix, Agda2, Cardano Smart Contracts, Blockchain Technologies

As part of a Haskell and Rust software consultancy, I worked across multiple clients and projects spanning developer tooling, compilers, blockchain decentralised apps, technical audits, and protocol designs. My role encompassed everything from initial scope discovery to end-to-end solution delivery, often navigating constrained timelines, budgets, and resources. I delivered quantifiable value for clients while serving as Engineering Lead for teams of 3-4 people, guiding and contributing to projects from conception to successful implementation.

Key Contributions:

- Author and contributor to LambdaBuffers, a schema language supporting algebraic data types
- Led audits of different smart contracts on the Cardano blockchain, including MinSwap and Indigo Protocol
- Author of GHAppy, a FOSS tool to create audit reports integrated from GitHub PRs, enabling more efficient audit deliverables
- Developed smart contracts for the Cardano Blockchain, including DEX implementations, escrow contracts, lending protocols, and an NFT marketplace

• Software Engineer & DevOps | FJS

2020 - 2021 | Bath, UK

Stack: TypeScript, GraphQL, Ruby, Docker, React

Developed and deployed a comprehensive web application and Google SketchUp plugin for 3D modeling of bespoke furniture, optimized for Fab-Lab manufacturing. The system streamlined the transition from design to fabrication by generating manufacturing-ready specifications, reducing production time and costs. My full-stack role covered the entire solution—from creating an intuitive frontend interface to implementing robust backend systems. I placed particular emphasis on DevOps and infrastructure, establishing automated CI/CD pipelines and containerised deployments that ensured reliable performance.

Key Contributions:

- Built a web application to create, configure, and view 3D models of furniture that interfaced with manufacturer specifications
- Developed a Google Sketch-up plugin/integration to interface with the web application

• Co-Founder & Software Developer | Evidify

2019 - 2020 | London, UK

Stack: TypeScript, Python

Co-founded a startup focused on developing tools for public domain data gathering and automated analysis/costing/rating of architectural layouts using ML and AI algorithms. Business plan centered on creating and providing insightful analysis of real-estate data as a service.

• **Founder & Software Developer | Furca**

2019 - 2021 | London, UK

Stack: Python & C/C++

Founded a startup focused on developing novel digital tools and providing automation services to architectural practices.

• **Architect | HUT Architecture**

2018 - 2020 | London, UK

Mention-worthy Contributions:

- Lead the effort to automate and digitise the processes, flows, and architectural design process at a medium sized architectural practice in London.

• **Architectural Assistant | Grimshaw**

2015 - 2017 | London, UK

Mention-worthy Contributions:

- Used Python, MaxScript to digitise and automate modelling and rendering chores for large infrastructure projects (HS2 viaduct) and skyscraper designs.

▸ Technical Skills

	Technologies
Actively working with:	Clojure, Clojurescript, Haskell, Java, Golang, Nix, Datomic, Postgresql, K8s
Experienced with:	AGDA2, AWS, Bash, C/C++, Common Lisp, Distributed Systems, Docker, Gcloud, HTML/CSS, Java, JavaScript, Purescript, Python, Rust, SQL, TypeScript, Unix Systems
Experimenting with:	Scala, OCaml, Elixir, Elm, Erlang, Unison

▸ Competitions and Awards

Competition	Level	Result
Showcode, UniCode	National	Qualified
Optiver Challenge - Hack the Burgh	Hackathon	1st Place
Oxford Hacks	Hackathon	Participant
UKIEPC	National	Qualified
Romanian Computer Science Olympics	Nationals	Qualified
***Inventics* Competition - Suceava County**	County	1st Place
Contest of Excellency Centres - Computer Science	County	Participant
Romanian Computer Science Olympics	County	Participant
INTEL ISEF - Reno, Nevada	International	Participant

▸ Education

• **MSc Computer Science | University of Bath**

2020 - 2021 | First Class Honours

Dissertation: *"FMCt: A Type System for the Functional Machine Calculus"*

"The Functional Machine Calculus, put forward by Heijltjes (2021) is a novel, lambda-calculus like model of higher-order computation integrating computational effects while maintaining confluence. In the unpublished paper the author puts forward ideas about a potential type system for the language, explored and extended by the thesis."

Key Modules:		
Artificial Intelligence	Computer Science Research	Cryptography
Databases	Foundations of Computation	Functional Programming
Logic & Semantics	Principles of Programming	Reinforcement Learning
Software Engineering		

• **PG Professional Practice | University of Bath**

2018 - 2019

• **MArch Masters of Architecture | Cardiff University**

2015 - 2017 | First Class Honours

• **BArch Architectural Studies | Cardiff University**

2012 - 2015 | 2.1

• **Mathematics & Computer Science | Suceava "Petru Rares" National College**

2009 - 2012 | AAA equivalent*

▶ **Personal Achievements & Interests**

Player @ Finsbury Park RFC	Former Player @ Sheffield Forgers RLFC	Sheffield Half Marathon Finisher since 2017
Former Player @ Sheffield Handball Club	North Norfolk Triathlon Finisher 2023	Rock Climber
Gower Triathlon Finisher 2021	London Architecture Softball League Team Captain	Prudential Ride London
WSA Summer Show Organiser	WSA Film Series Organiser	RYA Day Skipper

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