Ilia Batii

Generalist / DevOps / Fullstack

+44 7411281219 • batiyiv@gmail.com • London, UK

Profile

I'm contributing to various projects in the Starknet ecosystem. My main interests lie in DevOps for protocol engineering, blockchain research, ZKP technologies for decentralised computation in connection to the gaming industry.

I am a mathematician (5 years university training) and generalist software engineer (>15 years of experience).

I've contributed:

- Starknet.py (SNIP-9)
- Starknet Quest main landing redesign
- DipDup Stone Packaging
- DipDup.io
- Cairo Fixed Point math library
- Raito Implemented part of the UTREXO accumulator for Bitcoin ZK Client
- Starknet.go (fixing issues connected to outdated CASM format)
- Ekubo protocol governance

I've created:

- Cairo Fixed Point math library link
- Simple rust server for calculating BTC/USD TWAP using data from Pragma oracle link

I'm currently building:

- Auctions protocol in the TON ecosystem and auction making dApp(miniapp) in Telegram. $\underline{\text{link}}$
- Terraform provider for starknet (heavy WIP)

For those who understand:

NodeGuardians
OnlyDust
GitHub

I speak: Python, Kotlin, Golang, Cairo, Typescript, Rust and a bit of Solidity.



Zamna – London, UK **Founding Engineer focused on platform and product development.** 2017 - May 2024

SSI for the Airline Industry. We've built a secure (initially decentralised) ledger for storing facts about sensitive data without storing data itself. But allowing the party that knows the data to check against facts.

As a first hire I've been responsible for all pieces of tech stack.

Created and maintained cross cloud infrastructure using k8s in AWS and IBM cloud. Implemented various services in Golang to support our cryptographic protocol and Python to integrate computer vision systems.

Supported project integration processes with British Airways, Jetblue, Volaris.



EzHome – Palo Alto, US, Remote **Fullstack Developer. Growth Team** 2016 - 2017

Uber for Gardeners and Home services in Silicon Valley

- Implemented social authentication, integrating OAuth providers (Facebook, Nextdoor, Gmail). Customized the Django OAuth plugin to merge multiple social accounts under one email, improving the user experience.
- Built password-less authentication using magic links.
- Integrated an ML model (AWS Lambda) to predict gardening service prices instantly, cutting manual estimation delays from 2 weeks to 1 day. This innovation reduced user signup time from 2 weeks to 2 days and was fully automated for continuous model updates.
- Developed a marketing dashboard for growth team analytics.
- Created a Django-based application for managing postcard sending marketing campaigns, embedding service price estimates and short signup codes for easy user recall.
- Designed a user-friendly React frontend for querying and displaying dynamic pricing information.



Travelab – Indonesia, Bali **Technical Lead** 2015 - 2016

Dynamic tour packaging solution. Query travel facility providers and assemble tours in real time according to user requests.

- Led system production-readiness, ensuring it could sustain high traffic loads from metasearch engines.

- Implemented Continuous Integration (CI) & Docker migration, standardizing deployments and enabling local testing for developers.
- Established service observability with Graphene & Grafana, enabling data-driven decision-making for the product team.
- Diagnosed & mitigated critical production issues, enabling a full-scale production launch with 100% traffic.
- Developed key product integrations, including a DCS system integration to enhance functionality.

Stack:

Python, Flask, Nginx, Mongo, Aerospike, Redis, SQLAlchemy, Docker, Squid



emergingtravel.com / ostrovok.ru - Russia, Moscow Tech Lead of Extranet Development Team.

2011 - 2015

One of the leading hotel booking providers. Currently - Emerging travel. Local Booking.com competitor.

- Designed and developed a high-load <u>Extranet</u> application, scaling the team from 2 to 7 engineers.
- Led sprints, stand-ups, and external communications, driving efficiency and alignment.
- Owned business process automation, liaising with product owners to analyze requirements, prototype, and launch successful solutions.
- Built a self-documenting REST framework for Django, supporting multiple API versions (custom alternative to Swagger).
- Developed a high-performance distributed task management system, outperforming Celery in speed, to handle mailings and price recalculations with real-time monitoring.
- Optimized PostgreSQL databases & SQL queries, improving system performance and supporting large-scale data migrations.
- Conducted code reviews and mentorship, elevating the technical expertise of the engineering team.

Education

Moscow State University of Railroad Engineering (MSU RE) Bachelor Degree (5 years) in Applied Maths 2003 - 2008