

Simeon Manolov

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[LinkedIn](#) | [GitHub](#)

Seasoned backend software developer skilled in multiple programming languages. Bringing a strong passion for ML to the table and actively seeking opportunities to apply and further develop my skills in the AI domain.



EXPERIENCE

Personal development

Sep 2023 - Present

- Taking time off work to upskill myself on ML through research and hands-on personal projects.

SumUp, Sofia — *Senior Software Developer*

Dec 2020 - Aug 2023

- Re-designed existing Ruby services, building them from scratch using Elixir and Go; significantly reducing operational costs, improving performance and separating concerns.
- Reduced downtime by incorporating extensive observability into new and existing applications by leveraging OpenTelemetry, Prometheus, Grafana and Honeycomb
- Designed and implemented architectural improvements, emphasizing modularity, scalability, performance, reliability, automated testing and event-driven operation
- Extensively used Kubernetes and GitHub actions for CI/CD
- Contributed to the Elixir open-source community by implementing OpenTracing clients and AWS signers.

SumUp, Sofia — *Software Developer*

Oct 2015 - Dec 2020

- Developed RESTful backend micro-services in close collaboration with web, mobile and other backend developers to replace the existing monoliths, separating concerns into single-responsibility applications by using Ruby, Node.js, Python, PostgreSQL, Redis, RabbitMQ, Elasticsearch, AWS S3, AWS EC2 and Jenkins CI/CD
- Gained experience in the authentication, anti-fraud, ecom, fee, mobile edge, transaction processing, receipts, and reporting domains
- Contributed to the Ruby open-source community
- Conducted training for interns

SKILLS

Back-end development

- Elixir, Go, Python, Ruby, C++, JavaScript
- PostgreSQL, MySQL, Redis, Elasticsearch, Kafka, RabbitMQ
- Docker, K8s, GitHub Actions, Jenkins

Software architecture design

Machine Learning

- RL algorithms with PyTorch
- Neural network architectures
- RL environment design
- Hyperparameter optimization

Scrum

Soft skills

- Attention to detail
- Teamwork
- Communication
- Coaching & documentation

Electrical engineering

SPOKEN LANGUAGES

Bulgarian

English (C1)

German (B2)

SumUp, Sofia — *Junior Software Developer*

Jun 2014 - Oct 2015

- Worked on a JSON-RPC backend for mobile apps (Ruby, PostgreSQL)
- Proposed and implemented a coding style guide for improving codebase readability, consistency and maintainability

Circles Bulgaria, Sofia — *Software Engineer*

Aug 2013 - Jun 2014

- Designed and developed a back-office application (Ruby on Rails)
- Developed custom discovery scripts for HP UCMDB (Python)

Circles Bulgaria, Sofia — *Technical Support Engineer*

Aug 2012 - Aug 2013

ADRA Bulgaria, Sofia — *Technical Support Engineer*

Aug 2011 - Aug 2012

Telepoint, Sofia — *Telecommunications Engineer*

Dec 2010 - Feb 2011

EDUCATION

Technical University, Sofia

2012 - 2014, Master's degree

Computer Technologies and Applied Programming

Technical University, Sofia

2008 - 2012, Bachelor's degree

Telecommunications Engineering

Cisco Academy, Sofia

2008 - 2010, CCNA certificate

Computer Systems Networking and Telecommunications

National High School of Mathematics and Natural Sciences, Sofia

2003 - 2008, High School diploma

PROJECTS

[vcmi-gym](#)

2024

Develop the first ML-powered AI for the game "Heroes of Might and Magic III".

Diving deeper into ML, I stepped-up my RL skills and made the first ML contributions to the VCMi (an open-source engine for HOMM3) community. The project involved a lot of RL research, applying, customizing and implementing popular RL algorithms, optimizing end-user applications for ML purposes, neural network architecture design, multi-agent training, orchestration, metric collection and data analysis, prioritizing features, publishing reports, programming in Python and C++, writing documentation and making open-source software contributions.

[qwop-gym](#)

2023

An open-source reinforcement learning (RL) environment for the game QWOP, conforming the OpenAI Gym standard.

My growing interest in the area of AI technologies was the main reason undertake this journey in the world of RL. With this project I was able to exercise my software development skills to gain hands-on experience in the area of RL environment design while deepening my knowledge of RL algorithms and contributing to the open-source community.

[rs2lan](#)

2014

A device which provides emergency access via the GSM network to company hardware installed at remote sites.

The idea occurred to me as a result of the frequent problems around the access to remotely installed hardware. Strict security rules prohibited physical access for all but authorized personnel, typically located in another country. Rs2lan devices helped to greatly reduce downtimes and travel costs related to network issues in 3 remote sites.

By completing this project I improved my design, planning, cost estimation, electrical engineering, software development, system administration and networking skills.

Other projects for personal use - devices for opening doors remotely, audio pre-processors, industrial controllers, etc.