

# Simeon Manolov

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

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

### **GATE Institute, Sofia — Machine Learning Engineer**

Aug 2025 - Present

- Researching and applying machine learning solutions based on Graph Neural Networks to address practical problems in the smart city domain.

### **GATE Institute, Sofia — Senior Software Developer**

Nov 2024 - Aug 2025

- Leading technical applications of Data Spaces within GATE.

### **Personal development**

Sep 2023 - Nov 2024

- 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-designing existing Ruby using Elixir and Go; reducing operational costs, improving performance and separating concerns.
- Reducing downtime by incorporating extensive observability
- Designing and implementing architectural software improvements, emphasizing modularity, scalability, performance and reliability.
- Extensively using Kubernetes and GitHub actions for CI/CD
- Contributing to the Elixir open-source community

### **SumUp, Sofia — Software Developer**

Oct 2015 - Dec 2020

- Developing RESTful backend micro-services using Ruby and Node.js
- Implementing solutions in the authentication, anti-fraud, ecom, fee, mobile edge, transaction processing, receipts, and reporting domains
- Contributing to the Ruby open-source community
- Conducting 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

- Working on a JSON-RPC backend for mobile apps (Ruby, PostgreSQL)

## **Circles Bulgaria, Sofia — Software Engineer**

Aug 2013 - Jun 2014

## **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

### **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.