

EXPERIENCE

Quantum Communication System Engineer

Terra Quantum
St. Gallen, Switzerland

August 2024 — Present

- Leading development of Key Management System (**KMS**) for full-stack quantum key distribution (**QKD**) system in collaboration with hardware specialists.
- Implementing **post-quantum** cryptographic algorithms and certificate management.
- Architecting backend systems using **Python**, **PostgreSQL**, **Grafana**, and **Celery** in containerized environments (**docker**).

Software Engineer

Restaurant Supply Chain → AdTech

Delivery Hero

Berlin, Germany

October 2022 — July 2024

- Developed and maintained **Flask** APIs (**Python**, **SQLAlchemy**), adhering to CI/CD best practices.
- Integrated third-party APIs (**Shopify**, **Stream Chat**, **Twilio**) to expand software capabilities.
- Deployed and managed **AWS** services (**S3**, **Lambda**, **ECR**, **SQS**) with **Terraform**.
- Worked on **Dart**-based **Flutter** mobile app development.
- Improved performance of API gateways in **Go** resulting in **40%** latency reduction and accelerated **React** frontend loading times.

Software Engineer

360dialog

Berlin, Germany

July 2020 — September 2022

- Automated billing with **Stripe** API, greatly reducing the amount of manual work.
- Worked closely with **WhatsApp Business Platform** API to ensure a seamless messaging experience for the clients.
- Significantly increased speed of onboarding for new clients with **Embedded Signup**.
- Designed and implemented **Flask** APIs (**Python**, **SQLAlchemy**).
- Deployed **dockerized** services in the cloud (**GCP**).
- Utilised **Behavior-driven development** (BDD) with tests in natural language (**behave**).
- Enhanced monitoring in **Grafana** using **Prometheus** and connected alerts to **Slack**.

Quantum Software Engineer Intern

Wehner Group, Quantum Internet Division

QuTech

Delft, Netherlands

September — November 2019

- Developed in **C** an embedded firmware for Hercules LaunchPad microcontroller to control quantum physical setup via connection through ADwin-Pro.
- Collaboratively with physicists built a **Reinforcement Learning** system in **Python** to control setup of lasers during the experiments with NV-center in diamonds.

Machine Learning Engineer

ChatFirst

Moscow, Russia

September 2018 — April 2019

- Responsible for **NLP**. Investigated available ML models, stacked and utilised them in **Python** to improve performance of chatbots.
- Used **BERT** to improve performance of production system in multiple aspects. Fine-tuned the model for downstream tasks.

EDUCATION

M.Sc. in Computer Science and Physics

Moscow Institute of Physics and Technology, Russia

2019 — 2021

B.Sc. in Computer Science and Physics

Moscow Institute of Physics and Technology, Russia

2014 — 2019

TECHNOLOGIES & LANGUAGES

- **Languages:** Python, Go, Java, C/C++; **Frontend:** React, JavaScript, CSS/HTML;
- **Technologies:** PostgreSQL, Docker, Terraform, AWS/GCP, Git, BDD, Jenkins, Spinnaker;
- **Python libraries:** numpy, scikit-learn, pandas; **NLP:** NLTK, Gensim; **Deep Learning:** PyTorch, TensorFlow; **Web:** Flask, Django; **Databases:** SQLAlchemy, peewee.
- **English:** Full Professional Proficiency, **German:** C1, **Russian:** Native