



## Summary

A fast learner with 15+ years of deep experience in tech.

Is able to work independently with excellent written and spoken communication skills. Comfortable both in a leadership role or as part of a larger team. Driven by results and outcomes.

Has developed a high level of skill in software development and system design, primarily in Python, TypeScript and lately in Rust (but doesn't shy away from any tech stack fitting for the task at hand).

Passionate about extracting knowledge and meaningful insights out of different types of data. Highly proficient in Exploratory Data Analysis and Data Visualization. Able to build and deploy back-end infrastructure, tooling and APIs that facilitate Data Engineering, Machine Learning or Web applications at scale.

A true generalist able to work directly with clients to analyze their needs and go from concept to a working prototype.

## Skills

- **Data visualization** - can transform practically any data into an interactive visualization for either exploration during analysis or integration into a product
- **Storytelling** - able to communicate highly technical concepts and the limitations of a particular approach or analysis method to a non-technical audience
- **Prototyping** - can iterate quickly from concept to a working application and deploy the result
- **Infrastructure** - I can estimate the hardware requirements for data science or machine learning projects and set up necessary infrastructure (physical or cloud).  
Well versed with juggling different CUDA versions, encapsulating models and dependencies into containers.
- **Docker** - thorough understanding of the technology stack underlying Docker. Own a mental collection of best practices based on experience in solving common problems when deploying Docker in production (<https://medium.com/statuscode/debugging-a-docker-heisenbug-in-production-586ccb265f7c>)
- **Python (expert)** - My language of choice for data mining to system orchestration and everything in between. Weapons of choice: Pandas, PyTorch, Jupyter, Plotly, FastAPI etc
- **Javascript/TypeScript (advanced)** - Experience building React and Svelte applications. Building visualizations with D3 and Pixi.js. Some experience with low level WebGL. Have built working prototypes with

real-time visualization capabilities for large datasets streamed in from a backend

- **SQL** - comprehension of relational concepts. Able to write complex queries in MySQL and PostgreSQL
- **Go (advanced)** - Have written plugins for existing code, small microservices and utilities, taken part in some programming challenges.
- **Rust (advanced)** - Used it to build a highly performant parallel GIS data processing system with streaming web clients. Have built parallel API clients for financial data fetching and storage. Some experiments with eBPF tracing.
- **C (intermediate)** - Comprehension of the language and common pitfalls. Used it mainly to write plugins and enhancements to existing codebases or wrappers to libraries

## Experience

### Independent consultant

2022.12-present

I do data science and engineering consulting for companies of different sizes (from 10 people startups to established enterprises of 100+ employees)

#### *Main areas of interest:*

- Helping companies adopt LLM technology into existing products
- Building LLM data pipelines for business use cases
- Prototyping data solutions and project specific ad hoc data analysis/visualization

### Data Scientist, Ministry of Defense of Estonia

2018.05-2022.10

My main responsibilities included carrying out ad hoc data analyses, leading a small team of data engineers and prototyping tools for extracting information from wildly different types of data.

#### *Accomplishments*

- Helped with hiring and growing the team
- Prototyped and helped architect a large scale document processing system
- Prototyped a GIS system with streaming visualization capabilities for large datasets
- Prototyped a graph analysis and visualization system (with a custom rendering engine for performance reasons)
- Research into adapting and training neural networks for domain specific tasks and integrating into existing tools

### Data Engineering Lead, Rush Street Interactive

2017.12-2018.05

Responsible for making data accessible to other teams and anything data science related.

#### *Accomplishments*

- Designed and implemented a data migration solution
- Helped with streamlining a complex reporting flow
- Implemented a proof-of-concept for a game recommendation system

### **DevOps lead, Rush Street Interactive**

2015.08-2017.12

Leading a small team responsible for architecting, building and managing the infrastructure for several online casinos.

#### *Accomplishments*

- Architected the hardware and cloud setups for several online casinos
- Moving most of the development and deployment process into a containerized model
- Developed multiple small microservices for an online gaming platform
- Converted environments consisting of hand rolled snowflakes to almost fully declarative Infrastructure as Code
- Organized in house tech seminars
- Helped shape a culture where every developer is capable of deploying their code into production

### **Scientific programmer, University of Tartu**

2015.01-2015.08

Mostly consulting and R&D role for a bioinformatics research group

#### *Accomplishments*

- Set up a logging pipeline to aggregate logs from different services, applications and machines into a central storage for near real-time analytics (ELK stack) - providing great feedback on the usage of some public services, also real-time logstream processing for alerts.
- Driving the process of migrating all important services and software into containers. The goal was to greatly simplify the maintenance of systems and the development/deployment process.
- Consulting researchers on best practices in software development

### **System administrator, University of Tartu**

2010-2014

My main responsibilities included managing all the technical details of running compute clusters and other high performance computing infrastructure.

Besides maintaining the computational resources I also worked with different research groups and scientists consulting them in using these resources efficiently.

I also had the chance to architect and develop different systems to integrate some of our existing solutions and provide new functionality.

#### *Accomplishments*

- Participated in the design and building of two HPC clusters.
- Implemented a monitoring solution to cover the entire HPC infrastructure.

- Introduced configuration management processes and tools to fully automate node provisioning and simplify software deployment.
- Architected and developed several small software systems:
  - a power saving system to manage idle compute nodes
  - multiple versions of an accounting system to track the usage of computing resources
  - an Infiniband network topology visualization application

## Education

### University of Tartu

Master's degree, Computer science — 2010-2015

### University of Tartu

Bachelor's degree, Computer science — 2007-2010