

Árpád Goreity

Software Architect, Data Scientist



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WORK EXPERIENCE

Lead Bioinformatics Scientist

Medipredict Ltd.

Dec 2019 - Present

- Design and implement custom internal tools for microbiome and metabolomics analysis
- Explore and visualize data, perform statistical analyses for disease risk prediction
- Automate manual tasks, streamline work of scientists
- Mediate between microbiome researchers, medical doctors, software engineers, and the DevOps team
- Advise and mentor interns and junior team members

Data Platform Engineer

PrivátDoktor (S+H Portfolio PLC)

Sep 2020 - Present

- Train and deploy custom machine learning models for a telemedicine decision support system
- Optimize performance of existing data analysis pipelines (e.g. ECG and PPG signal processing)
- Introduce domain-driven design (DDD) and other best practices into software engineering team

Site Reliability Engineer

NumberEight Technologies Ltd.

May 2022 - Jun 2022

- Deploy Google Managed Prometheus in a fully automated manner
- Migrate existing services to Terraform and K8s
- Create containerized, reproducible development environment for future SREs

iOS Application Developer

Freelancer @ Curl (UK), OTP Group, Codie (HU)

Jun 2012 - Aug 2018

- Maintain and refactor large, mixed Swift/Objective-C code bases
- Implement client-side business logic involving local data storage, networking, and cryptography
- Work with UX designers to build ergonomic graphical interfaces

LANGUAGES

English (C2)

French (C1)

Hungarian

Italian

EDUCATION

MSc in Data Science

Università degli Studi di Padova, Dip. di Matematica

Sep 2018 - Jul 2020

- Thesis: Towards Personalized Disease Risk Prediction from Metagenome Analysis of the Microbiome
- Qualification: 110 / 110, Cum Laude

BSc in Bionic Engineering

Pázmány Péter Catholic University (PPCU FITB)

Sep 2013 - Dec 2016

- Thesis: Design and FPGA Implementation of a Protein Structure Comparison Method Based on Alignment of Backbone Conformations
- Qualification: 5 / 5 Excellent

SKILLS

Rust

Python

C++

Swift

Haskell

SQL

SQLite

Postgres

TypeScript

Unix shell

Git

Software design

DDD

Docker

Statistics

Data analysis

AVR µC

LaTeX

Typst

Leadership and mentoring

Public speaking

PROJECTS

Parsel

Compilers, Parsing, Macros

- Automatically generate parsers from AST specifications, without mapping boilerplate

NanoSQL

Databases, ORMs

- Strongly-typed, very lightweight data mapper for SQLite and Rust

SteelSafe

Cryptography, Security

- Ergonomic TUI password manager using modern cryptography primitives and robust software engineering practice