# **George Vasilakopoulos**

# AI & Software Engineer

From Mathematics and Data Science to Software Engineering and System Design.

#### **EXPERIENCE**

## AI & Software Engineer - UBS Zurich

Legal Tech

02.2024 - present

- Legal Semantic Search Engine ✓

Legal Documents Semantic Indexing and Searching with LLMs. Services: Azure Functions (Python), Azure OpenAI, Azure AI Search.

Storage: Azure Blob Storage, Cosmos DB Message Broker: Azure Service Bus. CI/CD Pipelines: Gitlab Pipelines.

IaC: Terraform.

Scalability: Millions of Documents

Extra Responsibilites: Software Component Manager

# AI & Data Engineer - Credit Suisse Zurich

CTOO

01.2023 - 01.2024

- Automation of Data Quality Evaluation +

Machine Learning as a Service (MLaaS) solution design and implementation. Backend Architecture: Python FastApi with InfluxDB.

Training Pipelines: Prefect.

CI/CD Pipelines: Jenkins. Deployment: Openshift(Kubernetes, Docker).

Evaluation of Data Similarity Ingested from External Sources +

Big Data Pipeline Solution Storage Layer: HDFS Data Warehouse: Hive Data Ingestion Layer: NiFi

Transformation Layer: Dbt and Spark

Full Stack / Quant Engineer - Credit Suisse Zurich Private Equity Markets

11.2021 - 12.2022

- End-to-end Private Equity Portfolio Report ✓

Backend Architecture: .NET Framework with C# and MS SQL Server. Frontend Architecture: Angular Framework with Typescript. Report Server: SQL Server Reporting Services (SSRS). 400 PE Client Reports are produced per month on average.

- Private Equity Portfolio Forecast using Statistical Models 🗸

Statistical Models: Yale model, Vasicek model, etc. RestApi (Python Flask) was implemented to expose the statistical prediction output to the Report Server (Power BI) in real-time.

### AI Researcher - IBM Research Zurich

Computational Systems Biology Lab

05.2021 - 10.2021

- Artificial Intelligence (NLP) approach to model the binding procedure of T-cell receptors (TCRs) and foreign antigens, by designing a Classifier Variational Autoencoder Model in a semi-supervised learning fashion.

#### **EDUCATION**

## ETH Zurich, Switzerland — MSc Data Science

09.2018 - 11.2021

Grade: 5.55/6

Courses: Advanced Machine Learning, Big Data, Data Management Systems, Computational Biomedicine, Computational Intelligence Lab, Computational Statistics, Data Science Lab, Machine Learning for Health Care, Natural Language Understanding, etc.

# ${\bf University\ of\ Patras,\ Greece-BSc\ Mathematics}$

09.2013 - 07. 2018

**Grade:** Excellent 8.81/10. Graduated in the Top 2% of Class. Specialization in Probabilities, Statistics, and Operational Research.

Thesis: Game Theoretical Aspects of Queueing Systems.

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#### **SKILLS**

Artificial Intelligence

**Statistics** 

Full Stack Development

Software Design

Azure, Hadoop, Spark

MongoDB, HBase, InfluxDB

SSRS, Power BI

PyTorch, TensorFlow

Python, Java, R, C#, SQL

#### **TEST SCORES**

GRE

01.2018

169/170 Quantitative Part

Mathematics-Panhellenic Examination 05.2013

Excellent 93%

Among the best 2% in Greece

## **LANGUAGES**

Greek: Native

**English: Proficiency** 

✓ : Production

**+**: PoC