

# Tamer Khraisha, Ph.D.

## Network and Data Scientist

I am a network and data scientist with domain knowledge in finance, economics, and technological innovation. I have expertise in statistical modeling, data mining, complex network analysis, data engineering, task automation, and the development of data products. I am interested in working in technological innovation research, applied machine learning, data product development, fraud/anomaly detection, and data strategy solutions.



### Personal Info

#### Address

Budapest, HU

#### E-mail

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#### Personal Webpage

[www.tamerkhraisha.com](http://www.tamerkhraisha.com)

#### LinkedIn

<https://www.linkedin.com/in/tamer-khraisha>



### Analytical Skills

Network science

Empirical finance

Data mining algorithms

Statistical analysis

Computer simulations

Stochastic modeling



### Software skills

Programming: Python, R

Database/ETL: SQL-92, Snowflake,

Postgres, MySQL, Apache Airflow

Web Development: HTML5, CSS, JavaScript

(D3, JQuery, Vue)

Cloud: AWS EC2 and S3

Big data: Apache Spark

OS virtualization: Docker

Version control: Git



### Languages

Arabic - Native

English - Fluent

Italian - Fluent

French - Basic



### Interests

Tennis, Gym, Hiking



### Working Experience

01-2018- Present

Data Engineer & Developer at Alphacruncher

KAPTÁR Coworking, Budapest, Révay köz 4, 1065

Alphacruncher provides an online, cloud-based platform for data management and data-driven education for university departments and research groups.

- Creating metadata for financial data models and supporting online documentation
- Creating interactive web visualizations and dashboards for financial datasets using D3.js and Apache Superset
- Creating a JQuery QueryBuilder application to create complex SQL queries and filters
- Researching methods employed in the extant literature for filtering and manipulating the financial datasets offered with citations
- Writing complex SQL code for implementing the various methods for filtering and manipulating the datasets
- Adding advanced functionalities to the Comprehensive Knowledge Archive Network (CKAN) for data management.
- Creating a Python library for automating the identification and correction of date formats in the datasets.
- Automating Extract, Transform, Load tasks by creating and scheduling Directed Acyclic Graphs (DAGS) scripts in Apache Airflow.
- Worked on data matching for reproducing datasets used in scientific papers
- Creating dockerized environment for testing web applications using Selenium



### Education

09-2015 - 05-2019

Ph. D. in Network Science

Central European University – Budapest, Hungary

01-2017 - 04-2017

Recognized Student at the Institute for New Economic Thinking at the Oxford Martin School

University of Oxford – Oxford, UK

09-2012 - 11-2014

Master's in Economics and Economic Policy

University of Bologna – Bologna, Italy

09-2008 – 03-2012

Bachelor of Science in Financial Economics

University of Bologna – Bologna, Italy



### Publications

Khraisha, T. & Mantegna, R. (2019) Network structure and optimal technological innovation. *Journal of complex networks*, (in press)

Khraisha, T. (2019). Complex economic problems and fitness landscapes: Assessment and methodological perspectives. *Structural Change and Economic Dynamics*. (In press)

Khraisha, T., & Arthur, K. (2018). Can we have a general theory of financial innovation processes? A conceptual review. *Financial Innovation*, 4(1), 4.