

LUCIAN BICSI

✉ lucianbicsi@gmail.com
in bicsi

📍 Bucharest, Romania
bicsi

☎ +40 741 690 951
bicsi



EXPERIENCE

CTO & Co-founder

Synaptiq Technologies

📅 Jun 2021 – Present 📍 Bucharest, Romania (remote)

- Working on a product that provides automatic contouring of organs-at-risk for cancer treatment using AI.
- Single-handedly developed the product from **idea stage** (TRL 2) to **scalable production-level** (TRL 9) software.
- Architected the front-end **medical image viewer** (React), back-end (Python + PyTorch), and agent workers (deployed using self-hosted Docker registries).
- Designed a highly-efficient **geometry kernel** (Rust + WebAssembly) for real-time manipulation of (vector) polyhedral shapes.
- Implemented a patient data protection workflow using a combination of **data anonymization & end-to-end encryption**.
- Pitched the product to investors in multiple occasions around Europe.

Full Stack Developer

RoboSelf Technology

📅 Oct 2019 – Apr 2020 📍 Bucharest, Romania

- Worked on a solution to automate repetitive tasks with intelligent **conversational agents** (React front-end, Python back-end, Google Firestore & Neo4J data stores, C# UiPath Workflows).
- Wrote a **natural language understanding pipeline** that combines machine learning, weighted context-free grammars, & information inside a graph knowledge base to understand the intent of a user.

Software Developer Intern

Jane Street

📅 Jul 2019 – Oct 2019 📍 London, UK

- Developed a web-based tool to **visualize market data** (OCaml), integrating it with the proprietary systems through a client-server architecture.
- Engineered & developed a solution for processing exchange data in post-Brexit scenarios.

Software Developer Intern

Google

📅 Jul 2018 – Oct 2018 📍 Mountain View

- Worked on an infrastructure project involving C++ & Go pipelines & bash scripts for distributed jobs.
- Wrote an IPython Notebook for visualizing & analyzing data.
- Extracted & analyzed live metrics from users using Google infrastructure tools.

EDUCATION

Ph.D. in Machine Learning

University of Bucharest

📅 Sept 2020 – Present

M.Sc. in Artificial Intelligence

University of Bucharest

📅 Sept 2018 – June 2020

- Valedictorian of my student cohort, with a GPA of 9.87/10.
- My Master's thesis focused on using deep learning for inferring algorithmic techniques found in competitive programming problems.

B.Sc. in Artificial Intelligence

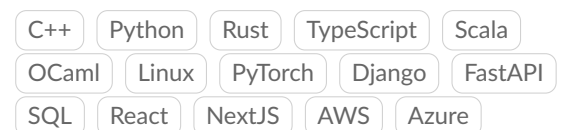
University of Bucharest

📅 Sept 2015 – June 2018

- Valedictorian of the CS department, with a GPA of 9.94/10.
- For my Bachelor's thesis I wrote a trie-like data structure that outperforms the C++ STL alternative (available on GitHub).

STRENGTHS

- **Fast Prototyping:** I can provide POCs efficiently, as well as scale them to production-level software.
- **Autonomy:** As an experienced software engineer in startup environments, I can accomplish complex and difficult tasks with little to no need for supervision.
- **Efficient coding:** Due to my passion for competitive programming and optimization contests, I write clean and efficient code, without much effort.



Software Developer Intern

Bloomberg LP

📅 Jul 2017 – Oct 2017

📍 London, UK

- Worked in a big data processing project involving Spark & Cassandra, having to learn Scala from scratch.
- Optimized computations on millions of data points to a couple of seconds (including data loading).
- Held presentations about my project in front of team members around the world, showcasing the results.

Junior Software Developer

ATOOOM Industries

📅 Jul 2016 – Jun 2017

📍 Bucharest, Romania

- Worked for a start-up developing mobile applications using Xamarin.Forms & C#.

Machine Learning Intern

Bitdefender

📅 Dec 2015 – Jun 2016

📍 Bucharest, Romania

- Wrote a scientific report comparing shallow RNNs to bloom filters on memory consumption for exact spell checking.

AWARDS & MENTIONS

Silver Medal – ICPC World Finals

📅 2021

📍 Moscow, Russia

My team of 3 ranked 8th at the most prestigious competitive programming contest, marking the first medal won by a Romanian team in 18 years. Our team solved 10 algorithmic problems of very high difficulty, requiring fast code writing and quick debugging.

First Place – ICPC South-Eastern Europe Regional Contest (SEERC)

📅 2017 & 2019

📍 Bucharest, Romania

Ranked 1st twice in the South-Eastern Europe regional contest of the ICPC, representing the University of Bucharest in the 2017 and 2019 editions of the contest.

Finalist – ICPC World Finals

📅 2018

📍 Beijing, China

Qualified and ranked 24th in the 2018 ICPC World Finals, representing the University of Bucharest.

Finalist – Google Hash Code World Finals

📅 2017

📍 Paris, France

Qualified and ranked 12th to the Google Hash Code finals, one of the most prestigious programming optimization contests.

- 12th Place

PUBLICATIONS

LANGUAGES

🇷🇴 Romanian – Native

🇬🇧 English – Fluent (C2)

🇩🇪 German – Beginner

PROJECTS

CPrep – Contest Preparation Tool

github.com/bicsi/cprep

CPrep helps problem setters create programming contests, by facilitating testcase creation and official solutions verification.

Autotest – Goal-oriented Test Case Generator

github.com/bicsi/autotest

An automatic workflow for test generation that uses a Tree of Parzen Estimators workflow to generate test cases that optimize a given metric in a black box manner.

Algo Snippets – ??

github.com/bicsi/kactl