

Mihnea-Stefan David

Zürich, Switzerland | Bucharest, Romania | Philadelphia, USA | Amsterdam, Netherlands

Languages: Romanian (native), English (C1), German (C1/DSD II)

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Summary

I am deeply committed to advancing education at all levels, a passion reflected in my academic path and extracurricular work. As a Computer Science student at ETH Zurich and exchange scholar at UPenn, I have explored cutting-edge research while supporting the academic community as a Teaching Assistant in multiple courses. Beyond academia, I have gained experience in software engineering, project management, event coordination, and leadership, building strategic partnerships and securing sponsorships. Fascinated by mathematics and physics since childhood, I found in computer science the perfect platform to merge rigor with discovery. At ETH I continue to push intellectual boundaries, eager to explore new frontiers through each project, collaboration, and breakthrough.

Experience

Software Engineer Intern Summer 2026
IMC Trading, Amsterdam, Netherlands

- Incoming Software Engineering Intern at IMC Trading Amsterdam.

Teaching Assistant — Algorithms and Data Structures Sep 2026 – Present
ETH Zurich, Zürich, Switzerland

- Returning as Teaching Assistant for Algorithms and Data Structures, supporting students with core algorithmic concepts, data structures, problem solving, and exercise sessions.

Teaching Assistant — Numerical Methods for Computer Science Sep 2025 – Present
ETH Zurich, Zürich, Switzerland

- Delivered tutorials and supported students in numerical linear algebra, optimization, and scientific computing using Python (NumPy, SciPy, Matplotlib).

Coding Assistant Sep 2025 – Present
ETH Zurich, Zürich, Switzerland

- Assisted students with debugging, performance optimization, and algorithmic problem solving; mentored programming best practices.

Teaching Assistant — Algorithms and Data Structures Sep 2024 – Feb 2025
ETH Zurich, Zürich, Switzerland

- Supported lectures and exercises in fundamental algorithms and data structures, including sorting, graphs, and dynamic programming.

Teaching Assistant — Algorithms and Probability Feb 2025 – Sep 2025
ETH Zurich, Zürich, Switzerland

- Led tutorials and exercises in randomized algorithms, combinatorics, and probabilistic methods.

Academic Facilitator — PVK Preparation Program Jan 2025; Jul – Aug 2025
ETH Zurich, Zürich, Switzerland

- Conducted intensive exam-prep workshops for Algorithms and Data Structures and Algorithms and Probability; designed problem sets and guided collaborative sessions.

Education

University of Pennsylvania 2026

Philadelphia, PA, USA

Exchange Program (Scholarship).

ETH Zurich (Swiss Federal Institute of Technology) 2023 – June 2027

Zürich, Switzerland

Bachelor of Science in Computer Science.

Tudor Vianu National College of Computer Science 2019 – 2023

Bucharest, Romania

Romanian National Baccalaureate: Mathematics (10/10), Physics (10/10).

Research Experience

Research Assistant — Differential Privacy in PAC Learning 2025 – Present

ETH Zurich, Zürich, Switzerland

- Conducting research on Differential Privacy in the PAC Learning framework under the supervision of two PhDs. Exploring privacy-preserving algorithms and their implications for learning theory.

Awards & Achievements

- 2nd Prize, NSS Space Settlement Contest USA (2022)
- Bronze Medal, National Informatics Olympiad – Romania (2023)
- Honorable Mention, National Physics Olympiad – Romania (2022)
- 2nd Prize, National Physics Competition “PHI” – Romania (2022)
- Recognition by the Romanian Parliament for academic excellence (2023)
- Selected for the Center for Excellence and Achievement in Computer Science – Romania

Leadership & Activities

- Organizing Team, ICPC Zurich (2024); Regional ICPC Switzerland – Problem Setter (2023)
- Member, Competitive Programming Committee at ETH Zurich (2023–present); Organizer, Contests
- Coordinator of the Robotics Team, Tudor Vianu National College of Computer Science (2022–2024)
- Member, Organizing Committee of the Regional Physics Olympiad (2023)
- First Vice President and Director, Bucharest School Board; Organizer, National High School Fair
- Student Representative, National Student Council and Tudor Vianu College Board
- Speaker, International Conferences (PHERECLOS); Organizer, Conference “Lay of Land”

Technical Skills

Programming Languages: C, C++ (incl. Eigen), Java, Python, SQL, Haskell, Promela, Scala (basic), Verilog, HTML/CSS, JavaScript, TypeScript

Libraries & Frameworks: NumPy, SciPy, Matplotlib, exposure to Pandas, PyTorch, scikit-learn

Systems & Tools: Linux, Git, Docker, VS Code

Databases: SQL, PostgreSQL, Oracle (Database Design & SQL Programming)

Certifications: IC3 (Glb Std 5), Cisco IT Essentials, Oracle Database Design & SQL Programming

Other: LaTeX (academic writing), fast learner, strong analytical skills

Selected Coursework

Algorithms and Data Structures; Algorithms and Probability; Algorithms, Probability and Computing; Numerical Methods for Computer Science; Theoretical Computer Science; Systems Programming and Computer Architecture; Compiler Design; Formal Methods and Functional Programming; Parallel Programming; Computer Networks; Digital Design and Computer Architecture; Introduction to Machine Learning; Probability and Statistics; Stochastic Methods; Linear Algebra; Analysis I–II; Signals and Systems; Visual Computing; Data Modelling and Databases; Fundamentals of Web Engineering; Introduction to Programming; Discrete Mathematics; Law and Tech; Solving Hard Problems in Practice; Introduction to Artificial Intelligence; Ethical Algorithm Design; Programming & Problem Solving; Algorithmic Game Theory