

Mark Bain

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SUMMARY

Engineer, research scientist, and experienced technology founder with extensive knowledge of AI, cybersecurity, and education technology. Founded a total of three companies.

EXPERIENCE

AIUS Technologies, Inc.

Palo Alto, CA

CEO/Founder and Research Scientist

Jan. 2024 – Present

- Conducted multiple research experiments in AI architectures, encompassing areas such as: vector embeddings, neural networks, adapters, PyTorch, large language models (LLMs), agentic frameworks, and Retrieval-Augmented Generation (RAG), with a focus on investigating the mathematical, physical, and neuroscientific foundations of AI.
- Developed AIUS Memory, a long-term memory solution for LLMs using GraphRAG and knowledge graphs.
- Created Aize AI, an assistant that facilitates knowledge mining from documents, videos, and audio files.

MrCertified sp. z o.o.

Warsaw, Poland

CEO/Co-Founder, Assistant Professor

May 2014 – Present, Feb. 2018 – Sep. 2023

- Managed a team of top engineers providing IT consulting and development for major clients.
- Taught classes as an Assistant Professor, and led a team of technology instructors.
- Led a project to rebuild a CTF simulation environment from the ground up for teams participating in NATO Lockshields exercises, including developing multiple advanced, custom-made CTF labs ranging from easy to very hard, featuring complex physical and virtual infrastructure.
- Managed the launch of over 800 live online classes per week for WSB Merito Universities, including automating classroom creation with a custom Java API SDK, and training and supervising over 500 staff members over a three-week period.
- Developed a custom ERP system using Google Sheets, Sheets and Drive API, Python app, and extended it with BigQuery, Looker Studio, Elasticsearch, and enterprise integrations.

PERK sp. z o.o.

Warsaw, Poland

CEO/Co-Founder

Jan. 2012 – Present

- Designed and developed the core architecture of the company's software, contributing 2,167 commits.
- Built seven apps: LMS, Offers, Recommender System, Search, CMS, Cloud Storage, and Printing Service.
- Raised over 500,000 EUR in public grants and a pre-seed round, and acquired two other start-ups.

EDUCATION

Stanford University

Palo Alto, CA

Summer Session in Computer Science

Jun. 2014 – Sep. 2014

SGH Warsaw School of Economics

Warsaw, Poland

Master's in Strategy Management and Marketing

Sep. 2010 – Sep. 2012

SGH Warsaw School of Economics

Warsaw, Poland

Bachelor's in Data Science in Economics and Information Systems

Sep. 2007 – Jul. 2010

TECHNICAL SKILLS AND INTERESTS

Programming: Python, PHP, Java, Bash, JavaScript, SQL, Cypher, REST/SOAP, HTML/CSS

Databases: MySQL, Redis, Elasticsearch, Neo4j, FalkorDB, Weaviate, Qdrant, BigQuery, Postgres, HDFS

Data processing: Pandas, NumPy, Matplotlib, CrewAI, LangGraph, AIUS, PyTorch, Tableau, PowerBI, Looker Studio, NetworkX, Advanced Excel and GSheets, R, Matlab, HDFS, Kafka, Spark

Clouds and DevOps: Docker, Ansible, GCP, Azure, AWS, VMware, Hybrid, Linux/Unix, PowerShell, Git, CI/CD

Networking and Cybersec: TCP/IP Stack & protocols, routing & switching, firewalls, Burp, ATT&CK, Caldera

Management: Strategy maps, BPMN, UML, SCRUM, Agile, Waterfall, UX, Design Thinking, CFA/CFP

Languages: Fluency in English and Polish, working fluency in Spanish and German

Interests: science, cooking, chess, running, hiking, aviation