Nasr Kasrin (PhD)

✉ nasr.kasrin@puma.com | ⌂ n42r.github.io | 🔗 nkasrin

Experience

Lead Solutions Architect
2024 - present

PUMA SE, GLOBAL E-COMMERCE ENGINEERING
Herzogenaurach, Germany

- Founded and led an organization of two teams (4+4+2) which improved PUMA.com's performance by 25%.
- Established (+ composed charter) of Ecomm Technical Cats (ETC) organization with a Tech Design Board & innovation forum.
- Led a war-room-like workshop of 15 technical experts to solve a complex problem causing PUMA NA to loose 9/10 orders on product launches.
- Investigated AI/LLMs for supporting software development and devised a initial framework for embedding LLMs in SE.

Data Architecture Scientist | Prototyper | Entrepreneur
2021 - 2024

FREELANCE
Bamberg, Germany

- Co-founding a startup for AI/LLM-driven solutions & building prototypes for products with millions of potential users (left when joining PUMA).
- Developed an AI-driven music recommendation prototype utilizing open-source LLMs, with positive feedback from pilot users (**MuzeAI**, below).
- Researched and invented a next-gen data architecture (post-data mesh) for exchanging data across organizations (& awarded a PhD for it).

Research Associate (Team Lead | Dev Lead | Architect | Data Solutions Engineer)
2015 - 2020

UNIVERSITY OF BAMBERG (EU-FUNDED MANUFACTURING PROJECT)
Bamberg, Germany

- Led a 4-year project to develop a data management SaaS platform which optimized operational efficiency by 30% in a €3.5 million 8-company EU aerospace manufacturing project *(See **github.com/simutool**)*.
- Engineered a read-heavy SaaS, ensuring seamless operations and future-proof cloud-native architecture (ex., docker, stateless nodes).

R&D Engineer (AI) | Team Lead | Software Architect
2011 - 2014

TAYAIT
Cairo, Egypt

- Built 2 AI players (java, C) for a mobile board game (backgammon), and lead a team of two R&D engineers to port them to Objective-C.
- Led a software engineering team in building 2 iOS mobile apps, driving rankings to 4.5/5 and increasing user engagement by 10.
- Reduced feedback-development cycle times by 25% by coordinating cross-functional collaboration between technical, business, and UI/UX.
- Saved the company 10-man months by investigating emerging trends and alternative paths and advising the CEO in fruitful directions.

Projects *(Titles are hyperlinks)*

Guestrrday & MuzeAI
2022 - 2024

- Developed personal open source projects: a music tagging tool (executed 20.000+ inputs) & an early AI-powered music discovery prototype.

The Basin Network (Doctoral Project)
2019 - 2023

- Invented an architectural pattern for data architecture (Cf. data mesh, data lake), culminating in a PhD and publication.

SIMUTOOL Data Lake
2015 - 2019

- Led the design & development of a data management SaaS for a consortium (aerospace, automotive), cutting turnover time by 30%.

Greetings Studio & Tawla (Backgammon Board Game)
2011 - 2014

- Directed two apps (iOS): an E-greeting card creation/sharing app and a mobile game, optimizing user engagement and Elevated app ratings.

Education

PhD. (Dr. rer. nat.)	Faculty of Information Systems & Applied Computer Science, Otto-Friedrich-Universität Bamberg, Germany	*2023*
Masters of Science	Faculty of Computer Science & Engineering, German University in Cairo, Egypt	*2010*
Bachelors of Science	Faculty of Computer Science & Engineering, German University in Cairo, Egypt	*2009*

Cover Letter

Dear Hiring Team,

Throughout my 15+ years in technology innovation, I have led and executed successful initiatives across AI, data architecture, e-commerce, robotics, and mobile applications. My experience spans start-ups, global corporate headquarters, and multi-million Euro publicly funded R&D projects. Focusing on AI and data, key highlights include:

- **MuzeAI** (2023-24): Built an open-source LLM-powered music recommendation prototype leveraging Spotify data, receiving promising pilot feedback.

- **The Basin Network** (2020-2023): Invented a next-generation data architecture for ML teams to share and remix data across enterprises, earning a PhD and two publications.

- **SIMUTOOL Data Management SaaS** (2015-19): Led a four-year initiative optimizing operational efficiency by 30% for an €3.5M EU-funded aerospace manufacturing consortium.

- **Tawla iOS mobile board game** (2011-13): Led development of AI players for an iOS backgammon game in a B2C environment, increasing engagement and sales.

- **RoboCup AI Soccer Team** (2010-11): Co-founded and co-led a team of 10 to develop an AI-driven soccer software that qualified for the 2012 International RoboCup finals qualification round.

Currently, as Lead Solutions Architect at PUMA's Global E-Commerce Engineering, I have:

- Founded and led an organization of two teams, improving PUMA.com's performance by 20%.

- Established the Technical Cats of E-Commerce initiative, fostering technical design and innovation.

My leadership philosophy is rooted in exploration, experimentation, and disciplined execution—without premature commitments to unproven directions. I believe in rapidly testing diverse approaches, recognizing early when to pivot, and driving innovation with a deep understanding of both technology and organizational dynamics.

In an industry where disruptive breakthroughs often emerge unpredictably, the ability to navigate ambiguity while systematically identifying high-value opportunities is key. My experience–spanning AI, data architecture, e-commerce, and R&D–has reinforced this mindset. As Director of AI and Machine Learning, I can bring this approach to PUMA, ensuring that our AI strategy is not only innovative but also pragmatic, scalable, and impactful for the business.

Sincerely,

Nasr Kasrin