BILAL AL TAKI

Tech Lead & Project Manager | AI, Data Science, and Applied Mathematics Specialist

Mars 22, 1991 | French & Lebanese | 14th arrondissement of Paris
bilal.altaki.math@gmail.com | +33 7 85 68 63 09
Homepage | LinkedIn | GitHub
Three months' notice | French Version of CV | Permis B

EDUCATION

Ph.D. in Appl. Math.

Grenoble-Alpes Univ. & Lebanese Univ.

2013 – 2016 | FR, LB

Title: On some heterogeneous models in fluid mechanics.

Master degree in Appl. Math.

Lebanese Univ. & Nantes Univ.

2011 – 2013 | FR, LB

Title: Stability of finite difference schemes for hyperbolic boundary value problems.

CERTIFICATIONS

- Data Science Prof. Certificate |IBM
- Machine Learning Special. |Stanford
- Google Project Management |Google

STRENGTHS

Leadership | Creativity | Adaptability | Teamwork | Autonomy | AI | Optimisation | Fluid Mechanics

INFORMATICS

Ansys | Python | SQL | OpenFoam | Latex | Git | Excel

RESPONSABILITIES

- Supervision of interns and apprentices
- Member of the jury for the "Advance" competition at EPITA
- Supervision of student projects at ESILV
- Technical expert in hydrodynamic stability, optimization, and mathematical modeling.
- Management of a 15-person team.

LANGUAGES

English
French
Arabic

PERSONAL PROJECTS

- Data Science with Python (, 2021)
- Car's generation detection (, 2021)
- Machine Learning with Python (, 2022)

AWARDS

Boya postdoctoral fellowship

ABOUT ME

PhD in Applied Mathematics with expertise in AI, data science, and fluid mechanics. Proven ability to oversee complex projects, apply interdisciplinary knowledge, and drive technological advancements across sectors like finance and engineering. With international experience in both academic and industrial research, I excel at driving innovation and translating complex technical concepts into practical solutions. I am eager to take on roles that blend technology leadership with strategic management to contribute to impactful, transformative projects.

EXPERIENCE

Project Manager R&D | Capgemini Engineering

April 2023–Present | Meudon, FR

- Managed the collaborative efforts of 15 technical experts in the development of a floating data center, achieving a comprehensive feasibility study that is now referenced for future marine technology projects.
- Technical leadership in implementing innovative solutions to address challenges associated with the design and maintenance of the offshore data center, based on hydrodynamic stability studies and mechanical calculations.
- Supervision of in-depth thermodynamic studies aimed at designing a mixed cooling system, utilizing both air and seawater for maximum efficiency, thereby reducing the data center's carbon footprint.
- Developing a digital twin to harness renewable energies while optimizing cost and maintenance.
- Documenting the results of risk analysis and project requirements, taking into account industry standards and regulations.

Researcher | TU Kaiserslautern

Sept 2022–Mars 2023 | Kaiserslautern, DE

- Theoretical and numerical study of complex fluid flows, particularly in biological applications such as drug transport in blood tissue and geophysical applications (Publication).

Research and Teaching Fellow | Sorbonne University

Sept 2021– Aug 2022 | Paris, FR

- Active participation in ANR-funded research projects to support innovation and scientific research.
- Supervision of interns and PhD students in their research work, contributing to the training of the next generation of researchers.

Researcher | Peking University

Jan 2020 – Aug 2021 | Beijing, CN

- Development and study of a mathematical model for modeling snow avalanches, including a theoretical analysis of the existence of solutions and numerical simulations performed in Python.
- Teaching mathematics to students at various levels, both nationally and internationally, covering a variety of mathematical topics (Teaching Portfolio).

Postdoctoral Researcher | INRIA & Sorbonne University

Sept 2017 – Dec 2019 | Paris, FR

- Presentation of research results at international conferences in the field, and regular publication of scientific articles in internationally renowned journals, enriching the body of scientific knowledge.
- Research on the shoreline model for the study of coastal phenomena and interactions between oceans and coasts, with implications for coastal risk management and ecosystem preservation.

SKILLS

- Strong project management and multidisciplinary team leadership skills.
- Proven expertise in analyzing complex problems and proposing innovative solutions.
- Excellent communication skills to foster collaboration between different teams.
- Adaptability to new technologies and fields, with a strong motivation for continuous learning
- Commitment to excellence and quality, with a rigorous approach to project success.
- Advanced expertise in in-depth research and publication of articles in leading journals, as well as participation in international conferences (Google Scholar Profile)