Morteza Montahaee | Resume

Status:	B.Sc. in Applied Mathematics and Computer Science at the FH-Aachen and in Mathematics at the PNU
Skills:	Java (awt, exception, io, nio, util, swing, beans), C#/.Net(protobuf (OVF), Numerics, Threading, Collections), C++, Python (collections, csv, cv2, io, Json, math, matplotlib, multiprocessing, networkx , numpy, os, random, scipy, shutil, seaborn(-image),skimage, sklearn, keras, tensorflow, xml.etree, zipfile), HTML, Liquid,JavaScript (Node (bootstrap, express, jquery, mustache, Sequelize)), SHACL, PHP, SQL (MariaDB, MYSQL), LaTeX (BibTeX, geometry, TikZ), Vim
Languages	• **Persian:** Native language • **Arabic:** Elementary
	• **German:** Advanced • **Englisch:** Upper Intermediate
Interest:	Calculus of Variations, Differential Geometry, Data Science, Design Patterns
Hobbys:	Wrestling, Football, Hiking, History, Mathematics

Profil

Graduate in Applied Mathematics and Computer Science and in Mathematics with completed MATSE-Apprenticeship. Practical experience in software development with a focus on generative modeling, database management, data science, and web application. Proven ability to work independently and collaborate effectively in a team. Deep interest in applying mathematical methods to solve complex and real-world problems, as well as researching and describing mathematical models and their implementation possibly according to design pattern solutions.

Experience

10/2019 - 08/2023 — **MATSE (Apprenticeship)** — DAP RWTH

> Worked on the development of an NX CAD library for generating Lattice in C# using Protobuf serialization

> Designed workflow management of additive processes in a UML-compliant process modeling (IDAM) with Enterprise Architect (EA)

> Participated in the development of research data models in Python on the Coscine platform

> Supported MAT.TRAFFIC GmbH as part of a MATSE project work in Python: Geo-detection of intersections for intelligent traffic systems and city planning using metadata from OpenStreetMap(OSM)

08/2009 - 09/2019 — **Additional professional activities** — NAJA, Frankenberg, Dachser, Event Probat, UB-RWTH

Sales Assistant (Bazaar)	(06/2003 - 09/2005)	Military Service	(08/2009 - 02/2011)
Temporary Worker	(07/2012 - 10/2014)	Delivery Assistant	(11/2014 - 06/2015)
Waiter and Event Assistant	(11/2014 - 10/2019)	Library Assistant	(07/2016 - 09/2016)

Education

10/2019 - 09/2024 — **Bachelor's Degree in Applied Mathematics and Computer Science** — FH-Aachen

> Focus: Linear Algebra, Stochastics, Numerics, Programming (OOP), Algorithms and Data Structures, Data Science, Databases, Software Engineering, Web and Communication Systems

> Bachelor's thesis (on Germany): Data-driven exterior differential calculus on graphs applied to the discretization of elliptic partial differential equations

04/2011 - 10/2016 — **Language Acquisition and Studies** — RWTH

> German language acquisition at the Language Center of RWTH (04/2011 - 07/2012)

> Unfinished Mathematics M.S.c at RWTH (10/2012 - 10/2016): Participation in modules in Image Processing, Neuroscience, Numerics (PDE), Optimization Theory, Calculus of Variations

10/2005 - 07/2009 — **Bachelor's Degree, in Applied Mathematics (Note: 2.2)** — PNU

> Bachelor's thesis: Application of Nonlinear Conjugate Gradient Algorithms for Estimation of Electromagnetic Inversion

> Focus: Linear Algebra, Numerical (ODE) and Mathematical Analysis, Mathematical Statistics, Graph Theory, Mathematical Models of Nature (ODE)