CONTACT

- ✉ Atamoradi8@gmail.com
- GitHub
- in LinkedIn
- ☎ +64 22 121 4070
- ⌂ Auckland, New Zealand

PROGRAMMING SKILLS

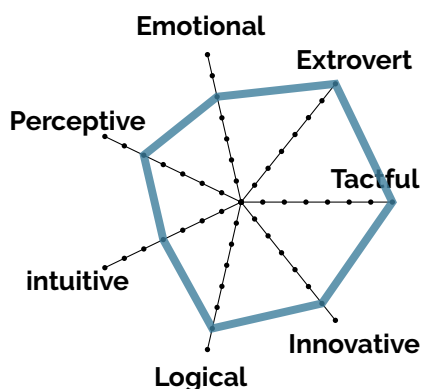**C/C++**   6+ yrs

C#   1+ yrs

Python   3+ yrs

SQL (MySQL)   1+ yr

MATLAB   10+ yrs

PERSONALITY

ATA MORADI

Software Developer

PROFILE

Motivated Software Developer with extensive experience in object-oriented programming, data management, embedded systems' implementation, AI, and control. Ability to work independently and as a group member. I enjoy coding, testing, and integration. Seeking a new challenges and opportunities to leverage. I take responsibility for finishing the work best and respect professional work.

WORK EXPERIENCE

2019 - 2022

Software Developer

Aquila Start-up, Tehran, Iran

Role: Design and development of ADCS software for simulation and management with GUI and hardware connection capability. Toolsets: C/C++, Python, SQL, STK, ARM Core Board, and Unity.

2018 - 2019

Satellite Attitude Determination and Control (ADCS) Engineer

Sharif Science and Technology Center, Tehran, Iran

Role: Conceptual, preliminary, and detailed design of ADCS subsystem. SIL, PIL, and HIL implementation. Moreover, final tests and sensors calibration. Toolsets: C, C/C++, SQL, VB, MATLAB.

2017-2018

Hardware in the Loop Programmer

Sharif Science and Technology Center, Tehran, Iran

Role: Programming and controlling the micro-positioning system with Serial and SPI protocol and creating the UI for monitoring the system. Toolsets: C/C++, Hterminal, Arduino IDE, Pixy Camera.

2016

Data Analyst of Observatory's Site Light Pollution

Avastar Company, Tehran, Iran

Role: Night sky image capturing with CCD and estimation of sky's background magnitude limit, and finding seeing parameter with image processing and data analysis. Programming with Python and MATLAB. Toolsets: Python, MATLAB, CCD, I.P. toolbox, 12in telescope.

AWARDS & HONORS

6th International Olympiad on Astronomy and Astrophysics (IOAA)

Silver Medalist
Rio de Janeiro, Brazil , 2012

7th National Astronomy and Astrophysics Olympiad

Gold Medalist
Tehran, Iran, 2011

National Mechanical Engineering Olympiad

Ranked 7th
Iran, 2016

Ranking among 68 Mechanical Engineering M.Sc. students

Ranked 2nd
Sharif University, Iran, 2018

Ranking among 128 Mechanical Engineering B.Sc. students

Ranked 7th & Best Thesis
Sharif University, Iran, 2016

National CubeSat Design competition among 18 teams

Ranked 1st
Iranian Space Agency, Iran, 2017

Merit-based Admission Offer to the M.Sc. program

Sharif University, Iran, 2015

Group C/C++ programming competition

Ranked 2nd
Sharif University, Iran, 2013

EDUCATION

2016 - 2018

M.Sc. – Mechanical Engineering

Sharif University of Technology, Tehran, Iran

Grade Point Average: 19.18/20.00 (A^+) via 32 credits

Thesis Subject: "Completing the Fabrication of Magnetic Micro-Swimmer Positioning System and Designing an Optimal Controller to Minimize Energy Consumption"

2012 - 2016

B.Sc. – Mechanical Engineering

Sharif University of Technology, Tehran, Iran

Grade Point Average: 18.87/20.00 (A^+) via 144 credits

Thesis Subject: "Novel Design and Manufacturing of Microfluidic PCR Amplification System by Temperature Control"

COMPUTER SKILLS

Visual Studio Code (Python, Jupyter Notebook, C#, VB .Net)

Qt (C/C++, TCP/IP and Serial Connection)

PyCharm (Python: Pandas, Numpy, SciPy, PlotLy)

MATLAB (Scripts, Optimisation, Curve fitting, Image processing)

GitHub (Git server, Internet based, Group Code Control)

Latex (Overleaf)

Office (Word, Excel, PowerPoint, Visio, Outlook)

IC Programming (AVR, Arduino IDE)

WORK INTEREST

Programming (Application Development, UI/UX, Test, Simulation)

Statistics & Data Analalysis (Big Data, Machine Learning, Data Base)

Optimisation (Searching methods, Multi Object, Heuristic Algorithm)

Embedded Systems (Connection Protocols, ARM, AVR, Raspberry Pi)