MOHAMMADREZA OSOULI

Software Developer

@ mohammadreza.osouli@gmail.com   ☎ +1 (403) 796-4691   📍 Calgary - Canada   ⌨ osoulim

SUMMARY

Computer science master's student with expertise in Computer Graphics and AI and 5+ years of experience in back-end and front-end development seeking a transition to the computer graphics industry. Proficient in developing and maintaining software.

WORK EXPERIENCE

Research Assistant - University of Calgary

Graphics, Interaction, and Visualization lab.

📅 Sep. 2021 - Dec. 2024   📍 Alberta, Canada

- Implemented NDT-RANSAC: An efficient RANSAC algorithm using normal distributions transform with better results for plane fitting and capacity of fitting other primitives. Github Repo.
- Attended and top-marked Animation graduate course (CPSC587) course with several projects such as Mass-Spring Simulation, Inverse Kinematics, and Boid Simulations.

Software Developer - Widenode

Senior full-stack developer

📅 Jul. 2022 - Present   📍 Alberta, Canada

Widenode is a platform for unified data governance, automatic APIs, and robust scaling of databases.
- Developed abstract layers over NoSql databases, File managing systems, and scalable systems.
- Designed and implemented general Vue 3 components for logical scripting

Software Developer - TAPSI

Mid-level back-end developer

📅 Feb. 2020 -July 2021   📍 Tehran, Iran

TAPSI is the fastest growing mobile transportation platform in Iran.
- Implemented real-time servers and micro-services with Node.js.
- Designed with NoSql databases like mongodb and redis.
- Solved real world problems, handling concurrency issues and practicing different software architectures and design patterns.
- Collaborated in a big team (more than 50 developers).

Teaching Assistant

📅 Sep. 2017 - Dec. 2024   📍 Tehran - Calgary

Teaching assistant of following courses.
- Basic and Advanced Programming (Python3 and C++)
- Data Structure and Algorithm Design
- Principles of Operating Systems (CPSC457)
- Theoretical Foundations of Computer Science I (CPSC251)

EDUCATION

M.Sc. of Computer Science
University of Calgary - GPA: 3.86/4.00

📅 Sep. 2021 - Dec. 2024

B.Sc. of Computer Science
University of Tehran - GPA: 3.55/4.00

📅 Sep. 2016 - Jan. 2021

TECHNICAL SKILLS

- Comfortable with C++17, OpenGL v4
- Comfortable with Linux systems
- Experienced in machine learning programming (Tensorflow, Keras, Scikit-learn)
- Familiar with Blender's plugin development
- Expert in Python (Django, Numpy, Pandas)
- Expert in JavaScript/Typescript (Node.js & Vue)
- Familiar with Docker and containerization
- PostgreSQL, MongoDB, Redis
- Git, Jupyter Notebook

PERSONAL SKILLS

- Having Teamwork Qualities.
- Familiar with working in big teams.
- Comfortable Working Independently.
- Ability to take initiative to solve problems.

ACHIEVEMENTS

- 14 place in Regional Contests of ACM-ICPC West Asia Region.
- 2nd place in 4th Sharif University CTF contest.
- Codeforces candidate master(handle : MamZi).

LANGUAGES

English (Full proficiency) and Persian (Native)