

# Amirreza Sokhankhosh

📞 431-293-6515

✉ [amirreza.skhn@gmail.com](mailto:amirreza.skhn@gmail.com)

🌐 [LinkedIn](#)

🐙 [GitHub](#)

📁 [Portfolio](#)

## HIGHLIGHT OF QUALIFICATIONS

---

## EXPERIENCE

---

### University of Manitoba

Graduate Research Assistant

Sep 2023 – Jul 2025

Winnipeg, Manitoba, Canada

- Designed and developed **novel distributed AI architectures** for scalable machine learning applications, including PoCL and SSFL, optimizing resource efficiency by **reducing communication overhead by 85.2%** and increasing fault tolerance by **62.7%**.
- Implemented and optimized machine learning models using **TensorFlow** and **PyTorch**, ensuring high-quality performance in **production environments**.
- Conducted extensive data preprocessing and feature engineering to prepare large-scale text datasets for analysis, ensuring **model reliability** and effective evaluation processes.
- Explored and experimented with generative AI techniques in research-focused projects, contributing to the understanding of **blockchain-driven personalization** in federated learning.
- Authored and published research in top-tier IEEE venues, showcasing **technical communication** skills and deep insights into advanced machine learning methodologies.

### Bobo

Full-stack Developer Intern

May 2024 – Aug 2024

Winnipeg, Manitoba, Canada

- Developed and deployed **RESTful APIs** to enhance data management, aligning backend functionalities with project goals on an agile development team.
- Automated data integration processes using Python, streamlining database population from CSV to SQL, contributing to significant efficiencies in data handling.
- Collaborated with cross-functional teams to ensure the APIs met user interface requirements, enhancing **system scalability** and performance.
- Contributed to maintaining technical documentation and coordinated project tasks using the **Atlassian suite**, promoting effective collaboration in an agile environment.

### K. N. Toosi University of Technology

Lead Teaching Assistant

Jan 2021 – Jan 2023

N/A

- Designed and delivered lectures on complex technical subjects, including **Algorithm Design** and **System Design**, effectively enhancing student comprehension and engagement.
- Provided tailored academic support to over 300 undergraduate students, demonstrating strong **communication skills** in conveying complex concepts to diverse learners.
- Developed practical coding projects that incorporated advanced data structures, fostering problem-solving skills in students and preparing them for real-world challenges.
- Facilitated collaborative learning by leading study sessions focused on **Distributed Systems** principles, improving student performance and understanding of critical topics.

### Sadr Group Company

Full-stack Developer Intern

Jul 2020 – Dec 2020

N/A

- Implemented secure **RESTful APIs** with **Adonis.js** and **Express.js**, enhancing application security through JWT authentication, crucial for production deployment.
- Conducted thorough testing and documentation using **Swagger**, facilitating seamless integration and knowledge transfer within the team.
- Coordinated with the Agile Scrum team to optimize CI/CD workflows, actively participating in sprint planning and task management with **ClickUp**.
- Designed and managed database schemas using MySQL for effective data handling, showcasing strong backend development skills aligned with production operations.

PROJECTS

---

EDUCATION

---

<b>University of Manitoba</b> <i>Master of Science in Computer Science (GPA: 4.4 / 4.5)</i> <ul style="list-style-type: none"><li>• <b>Relevant Coursework:</b> Security &amp; Privacy, Deep Generative Modeling, Blockchain &amp; Distributed Systems: A+</li></ul>	Sep 2023 – Aug 2025 Winnipeg, Canada
<b>K.N. Toosi University of Technology</b> <i>Bachelor of Science in Computer Engineering</i>	Sep 2018 – Feb 2023

TECHNICAL SKILLS

---