

Kamyar Nazeri

September, 2024 - Toronto, ON

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Work Experience

Principal Software Engineer | Jan. 2022 - PRESENT | Toronto, Canada.

Harris Computer . harriscomputer.com

- Directed the design and development of enterprise on-prem and SaaS solutions for utility billing systems.
- Led the architectural overhaul of an enterprise monolith into scalable microservices and asynchronous processes.
- Initiated the operational API modernization: OpenAPI, OpenTelemetry, Instrumentation, Monitoring, and Throttling.
- Enhanced existing full-text search API by designing semantic search solutions powered by large language models.
- Executed the transition of the main codebase from .NET Framework to .NET (Core), covering +2.5 million lines.
- Delivered SR&ED tax incentives technical documents, securing a 15% investment tax credit for 2021, 2022, and 2023.
- Initiated and led the adoption of Git, migrating the full history of +120,000 commits from Subversion (SVN) to Git.
- Designed and implemented a streamlined release cycle and branching workflow of software package deployments.

Senior Software Developer | Jun. 2019 - Jan. 2022 | Toronto, Canada.

Harris Computer . harriscomputer.com

- Conducted monthly R&D code review sessions and mentored junior and co-op developers.
- Enhanced the existing REST API security: OWASP standards, Veracode SAST/DAST, and PII compliance.
- Developed multiple identity management solutions for API authentication: SAML, JWT, OAuth 2.0, OpenID Connect.
- Implemented custom query language full-text search API: parser, ranker, and mapper for major relational databases.

Consultant Software Architect | Jan. 2022 - Apr. 2023 | Remote, United States.

Amove Technologies . amove.io

- Direct and design a highly scalable data migration solution across various cloud storage services —petabyte-scale transfers between AWS, Azure, GCP, and S3 compatible storages.
- Led the development of the cross-platform desktop client for unified management of cloud storage services for AWS, Azure, GCP, and S3 compatible, on Windows, MacOS, and Linux.

Research & Teaching Assistant | Jan. 2017 - Jun. 2019 | Toronto, Canada.

Faculty of Science, Ontario Tech University . mcsc.science.uoit.ca

- Researcher in Machine Learning & Generative Models for Computer Vision. | ImagingLab.ca
- Teaching assistant for the undergraduate science and engineering courses:
Math 1000 - Calculus for Science | Math 1010 - Calculus I for Engineering | Math 1020 - Calculus II for Engineering
Math 2050 - Linear Algebra for Engineering.

Lead Software Developer & Manager | Mar. 2012 - Dec. 2016 | Tehran, Iran.

RaeenSystem Company . raeensystemgroup.ir

- Evaluate and interview candidates for technical positions.
- Led a team of 20, including developers and operations as a technical manager of the Products & Services unit.
- Lead developer in hardware-software integration of equipment for hospitality, retail, and travel industries.

Senior Software Developer | Feb. 2007 - Mar. 2012 | Tehran, Iran.

RaeenSystem Company . raeensystemgroup.ir

- Design and development of internal reactive web UI framework —Raeen-UI.
- Build and manage 12 reactive web components for RTL languages based on jQuery and Raeen-UI frameworks.
- Lead developer in the financial web app for Iran Touring & Tourism Investment Co. (distributed in +100 cities).

Software Developer | Apr. 1999 - Dec. 2006 | Isfahan, Iran.

ExirSoft Company

- Contributed to the development of a web-based live-help chat system and web analytics tool.
- Participated in developing the first Persian e-commerce website launched in 2000. | PersianFlora.com

Technical Expertise

Languages: C#, Java, JavaScript, TypeScript, Python, SQL, PowerShell, LaTeX.

Technologies: Docker, Kubernetes, gRPC, GraphQL, REST, ASP.NET, Spring Boot, Nginx, IIS, Git, SVN, OpenAPI.

Databases: Microsoft SQL Server, PostgreSQL, MongoDB, Redis, LiteDB.

IDEs & Tools: MS Visual Studio, JetBrains IntelliJ, VSCode, JetBrains Rider.

Technical Skills:

- Well-versed in system design, clean code and architecture, object-oriented design patterns and principles, test-driven development (TDD) & domain-driven design (DDD).
- Specialized in large-scale .NET and Java software design & development (since 2002).
- Experienced in:
 - Database analysis and design, for relational, NoSQL, and in-memory database systems.
 - Scalable API design and development: REST, gRPC, GraphQL, OpenTelemetry, OpenAPI.
 - Service-oriented, data-driven, and client-server software architecture and implementation.
 - Scalable, highly-available distributed and cloud-based architecture: AWS and Azure.
 - Overseeing the full software lifecycle: architecture, analysis, design, development, and support.

Education

Ontario Tech University | Jan. 2017 - May. 2019 | Oshawa, ON, Canada

Master of Science in Modeling & Computational Science - AI (GPA: 3.88/4.00)

Isfahan University of Technology | Sep. 1999 – Jul. 2004 | Isfahan, Iran

Bachelor of Science in Electrical Engineering - Control

Recent Publications

Edgeconnect: Structure-Guided Image Inpainting Using Edge Prediction | Nov. 2019 [↗](#)

K. Nazeri, E. Ng, T. Joseph, F. Qureshi, and M. Ebrahimi *Proceedings of the IEEE/CVF International Conference on Computer Vision*. Seoul, South Korea [arXiv: 1901.00212](#)

Edge-Informed Single Image Super-Resolution | Nov. 2019 [↗](#)

K. Nazeri, H. Thasarathan, and M. Ebrahimi *Proceedings of the IEEE/CVF International Conference on Computer Vision*. Seoul, South Korea [arXiv: 1909.05305](#)

Image Colorization with Generative Adversarial Networks | Jul. 2018 [↗](#)

K. Nazeri, E. Ng, and M. Ebrahimi *Springers Lecture Notes in Computer Science, Proceedings of tenth international conference on Articulated Motion and Deformable Objects (AMDO)*, Palma, Mallorca, Spain. [arXiv: 1803.05400](#)

Two-Stage Convolutional Neural Network for Breast Cancer Histology Image Classification | Jun. 2018 [↗](#)

K. Nazeri, A. Aminpour, and M. Ebrahimi *Springers Lecture Notes in Computer Science, Proceedings of International Conference on Image Analysis and Recognition (ICIAR)*, Póvoa de Varzim, Portugal. [arXiv: 1803.04054](#)

Contributions

GitHub | Oct. 2012 - PRESENT

Actively engaged in open-source initiatives through a number of public GitHub repositories.

<https://github.com/knazeri>

StackOverflow | Nov. 2011 - PRESENT

Top 1% overall contributor on StackOverflow, achieved the highest privilege of 'Trusted User' for quality engagement.

<https://stackoverflow.com/users/1041321/knazeri>

Google Scholar | Nov. 2018 - PRESENT

Notably contributed to the field of computer science, authoring publications amassing over 2,000 academic citations.

<https://scholar.google.com/citations?user=rld6wTAAAAAJ>