Kaveh Samiee

Principal Algorithm and AI Engineer

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Finnish PR Work Permit

About Me

I hold a Ph.D. in Signal Processing with a strong focus on Machine Learning and over a decade of professional experience across various industries. My expertise spans time-series analysis, computer vision, machine learning, and large-scale data analytics, with a particular emphasis on applications in the healthcare sector. As a versatile full-stack data scientist with a multidisciplinary educational background and diverse work experience, I excel at integrating knowledge and skills from different domains, leveraging practical problem-solving and critical thinking to deliver impactful solutions.

Key Skills

Advanced Analytics	Time-series, Edge-AI, Signal Processing, Statistical Analysis, Machine Vision, Representational learning
Programming	C++/C, Python, SQL, Matlab, Java, JS, HTML, CSS, VB
AI / Machine Learning	Proficient in deep learning frameworks (TensorFlow, PyTorch, Keras, JAX), classical ML libraries (Scikit-learn, XGBoost, LightGBM), data & computer vision tools (Pandas, Numpy, Scipy, OpenCV), XAI tools (SHAP, Captum), MLOps/workflow orchestration (MLflow, Airflow), distributed computing (Apache Spark, Dask), and model deployment (TensorFlow Lite, ONNX, PyTorch Mobile, Azure ML).
Big Data	Experienced with cloud platforms (Azure, AWS), containerization and orchestration (Docker, Kubernetes), and backend technologies (Flask, Nginx)
Databases	Skilled in relational (PostgreSQL, SQL Server, SQLite) and NoSQL (MongoDB) databases
Other	Team Leadership, Agile methodologies

Experience

May 2025–Present	**Principal Algorithm and AI Engineer**, *Doublepoint*
Sep 2021–Aug 2025	**Staff Algorithm Software Engineer**, *GE Healthcare* Algorithm development and MLOps engineer in ECG platform team.
Apr 2021–Sep 2021	**Technical Leader**, *Nokia* Local product owner for ML/AI solutions in next-gen cellular networks. Machine learning engineer. Supervising juniors and M.S. thesis workers.
Feb 2019–Mar 2021	**Senior Data Scientist**, *Fujitsu* CleverHealth Network (E-MOM): architect and full-stack developer; Walking monitor platform: technical lead. Retinopathy diabetic detection: data Scientist; Recommendation Engine (internal): data Scientist.
Feb 2018–Feb 2019	**Senior Data Scientist**, *GE Healthcare* Team lead for biomedical predictive models, unsupervised/generative approaches for medical data, thesis adviser.
Aug 2015–Feb 2018	**Algorithm Developer Software Engineer**, *GE Healthcare* Development of ECG algorithms, unit tests, performance testing, multi-modal predictive models.
Aug 2011–Aug 2015	**Researcher**, *Tampere University of Technology* EEG/ECG classification, sparse signal decomposition, Image classification and retrieval.

Sep 2013–May 2015 **Teaching Assistant**, *Tampere University of Technology*
Graduate course: Image Processing I.

Mar 2006–May 2011 **Electronics & Automation Engineer**, *Grohe / Mohandesi Tose Sanaye Atlas Persia*
ARM-based embedded systems, PCB design, PLC programming.

Apr 2009–Aug 2009 **Electronics Engineer**, *Koopa Pajouhesh*
Image processing software for inspection and defect detection; portable metal hardness tester design.

Jun 2005–Mar 2007 **Electronics Repair Specialist**, *Behza Co*
Industrial offset printing machine repair engineer.

Education

2013–2019 **Ph.D. Signal Processing**, *Tampere University*, Finland

2005–2007 **M.Sc. Electrical & Electronics Engineering**, *Iran University of Science and Technology*, Iran

2000–2005 **B.Sc. Electrical & Electronics Engineering**, *University of Mazandaran*, Iran

Certificates

2023 Microsoft Azure Data Scientist Associate (DP-100)

2024 Microsoft Azure Data Engineer Associate (DP-203)

Patents

US Patent Methods and systems for patient monitoring, US11432778B2

Publications

+20 Peer-reviewed articles *+825 citations*
`https://scholar.google.fi/citations?user=1UflL34AAAAJ`

Thesis Advisor

Advisor and co-advisor of several M.S. these workers, few selected topics:

T. Petaja (2019) Prediction of Patient Deterioration in the Emergency Department using RNN

L. Medeiros (2020) Feature Engineering and Predictive Modeling in Biomedical Signals

K. Dhakal (2023) Log Analysis and NLP-based Anomaly Detection

Language Skills

English Full professional proficiency

Persian (Farsi) Native

Interests

Professional Healthcare and well-being applications, Edge AI & embedded intelligence, Multimodal data analysis, Smart wearables and biosensor technology

Personal Reading, yoga, climbing, photography, aquarist, DIY projects, enjoying quality time with my wife and our adorable fluffy dog