

Farzad Sharifbakhtiar

Education

2018–2020 M.Sc. in Computing Science, Simon Fraser University, Burnaby, BC,

Supervisor: Prof. Joseph Peters, CGPA 3.69/4.

2012–2014 B.Sc in Computer Engineering, Sharif University, Tehran, Iran,

Dissertation Supervisor: Prof. Mohammad Ghodsi, CGPA 3.13/4.

Experience

Jun.2021 – ML Engineer, MOSAICAPP – HR Management Software, Vancouver, British Columbia.

May. 2022 Python, Pytest, SQL, GCP, Pandas, Asyncio, NLP

- Developed the product's core recommendation system.
- Developed the backend data to ML model pipeline.
- Implemented NLP pipeline V0.
- Created a test suite for the ML framework.

Jan.2018– **Software Developer**, VIDEOBOOM – *AdTech*, Tehran, Iran.

May.2018 Python, MongoDB, OpenRTB, Microservices, REST API

- Designed a microservice real-time video ad auctioning server.
- Developed the DSP (demand side supplier) microservice.

Oct.2017- Software Developer, Peeyade - End-user Application, Tehran, Iran.

Jan.2018 Python, MongoDB, Elasticsearch, REST API

- Built a search system for locations/events/content.
- Exposed a REST API.

Jan.2013- **Software Developer**, TEZLABS - *ERP Software*, Tehran, Iran.

Oct.2017 PHP, Javascript, MySQL, Symfony

- Reengineered the legacy ERP system and its underlying framework.
- Turned coupled PHP5 code into object oriented PHP7 code.
- Held workshops on OOP and the new ERP framework.
- Created a test suite for the system.

Selected Projects

Summer 2020 Adaptive Influence Diffusion, Masters Thesis, Simon Fraser University.

Influence Diffusion, Graph Analysis, Algorithms and Complexity

- Proved the Greedy Algorithm's indifference to adaptive feedback.
- Proved the Greedy Algorithm's high performance measure without feedback.

Spring 2019 Biased-attention Image Classifier, Deep Learning Project, Simon Fraser University.

Deep Learning, Python, Pytorch, Slurm

- Designed a general attention module for convolutional neural networks.
- Ran 1000s of experiment sets on ComputeCanada servers using Slurm.
- Shrunk a network by 30% without loss of accuracy.

Spring 2017 **Connected Components of Erdős-Rényi Graphs in Map-Reduce**, Undergraduate Thesis, Sharif University.

Map-reduce, Graph Analysis, Algorithms and Complexity

- Designed a Map-reduce algorithm to compute connected components in Erdős-Rényi random graphs.
- Best-to-date map-reduce round complexity.

Summer 2015 Parallel Skyline Computation, IEEE MEMOCODE Competition, IPM, Iran.

Concurrency, GPGPU, CUDA, C++

- Researched a GPU algorithm to compute the skyline operation over dynamic data points.
- Our team placed 2nd. Results page: http://memocode.irisa.fr/2015/designcontest.html

Spring 2014 **Custom Process Scheduling in the Linux Kernel**, Operating Systems Design Project, Sharif University.

Kernel Programming, C

o Implemented Multi-level Feedback Queue process scheduling in a FreeBSD kernel.

Winter 2014 **Predicting Properties of Nano Particles through Visual Features**, Publication, Sharif University.

Image Processing, C++, OpenCV

- Extracted morphological features to predict properties of nano particles from electron microscopy images.
 Published in RSC Advances 2014.
- Publication link: https://pubs.rsc.org/en/content/articlelanding/2014/ra/c4ra10375k

Technical Skills

Strengths Python, OOP, SQL, Testing, Algorithms and Complexity, Graph Analysis.

Practical Experience

GCP stack, Pytorch, Pandas, Django, Deep Learning, NLP, NoSQL, Concurrency.

Etc.

Languages: Persian, English, German.Free Study: Mathematics, Psychology.

Rest: Nature, Swimming, Food, Music, Meditation.