FARZAD SHARIFBAKHTIAR

Nanaimo BC, Canada 1.604.442.6105, <u>FarzadSBakhtiar@gmail.com</u>

TOOLSET EXPERIENCE

> 1000 Hours:

Python, PHP(5,7) & Symfony(2,3), MySQL, DOM-based JS, Git, OO Design Patterns, Algorithms

250-1000 Hours:

Java, C

50-250 Hours:

Unit and Functional Testing, REST, Nodejs, Apache, MongoDB, Pytorch, Django, Slurm, Elasticsearch, Micro services

< 50 Hours:

Redis, Hadoop, CUDA, OpenMP, AWS, Docker, Google Ads/Analytics

EDUCATION

M.Sc, Computer Science	Fall 2018
Simon Fraser University, Burnaby BC, Canada	- Fall 2020
Supervisor Prof. Joseph Peters	

B.Sc, Software Engineering

Fall 2012 - Fall 2017

Sharif University of Technology, Tehran, Iran Supervisor Prof. Mohammad Ghodsi

WORK EXPERIENCE

<u>Videoboom, Tehran, Iran</u>	January 2018 -
Software Developer, full-time - Python, OpenRTB	May 2018

Designed a real-time video ad auctioning server with a micro-service architecture. Implemented the DSP micro-service.

Peeyade, Tehran, Iran Settuare Developer freedomes Pather Floridae with Settuary 2018

Software Developer, freelance - **Python, Elasticsearch**Built a search system to search for locations/events based on the user's geo data.

Tezlabs, Tehran, Iran October 2017

Software Developer, part-time - PHP, Symfony2

Redesigned and implemented the legacy ERP system and its underlying framework.

Took PHP 5.x "spaghetti" code and delivered object oriented 7.x code. Designed a framework for the ERP system based on Symfony2 – later migrated to Symfony3.

Added unit and functional testing to the system/development cycle.

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PROJECTS

Connected Components of Erdős-Rényi Graphs in Map-Reduce

Sharif University, Iran - Undergraduate Dissertation - Theoretical Work,

Map-Reduce

Designed a distributed algorithm with best-to-date average *Map-Reduce* round complexity for finding Connected Components of a family of random Graphs (Erdős-Rényi graphs).

Multi-core Skyline Computation

IPM, Iran - IEEE MEMOCODE 2015 Team-competition - C, OpenMP

Designed and implemented a parallel algorithm to compute the *skyline* operation over a number of data points – we placed 2nd.

Biased-attention Image Classifier

Simon Fraser University, Burnaby BC - Deep Learning Course Project -

Python, Pytorch, Slurm

Designed a general attention module for convolutional neural networks.

Ran mass experiments on a server cluster using Slurm.

Shrunk a network by 30% while improving its accuracy.

<u>Attention Based Neural Machine Translator with Relative Position</u> Representation

Simon Fraser University, Burnaby BC - NLP Course Project - Python,

Pytorch

Implemented the *Attention with Relative Position Representations* attention mechanism on the *Harvard Group*'s baseline attention-based Neural Network.

Web Crawler and Search Engine

Sharif University, Iran - Information Retrieval Course Project - Python,

Elasticsearch

Created a crawler for journal articles *Researchgate.net*.

Used *Elasticsearch* to implement search on the crawled papers.

Custom Process Scheduling in the Linux Kernel

Sharif University, Iran - Operating Systems Design Course Project - C,

FreeBSD

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

Spring 2017

Summer 2015

Spring 2019

Fall 2018

Fall-Winter 2017

Spring 2014