Kian Ahrabian

Current Position
School of Computer Science
McGill University
Montreal, Canada

Contact Info
Email: kian.ahrabian@mail.mcgill.ca
Google Scholar: Kian Ahrabian
Github: kahrabian
Webpage: https://www.cs.mcgill.ca/~kahrab

Research Interests	Machine Learning	
	Natural Languages Processing	
	Information Retrieval	
	Software Engineering	

Education	**McGill University,** M.Sc. in Computer Science	2019 - Now
	University of Tehran, B.Sc. in Computer Science	2014 - 2018
	GPA: **17.90/20,** Ranked **2nd (out of 33)**	
	Thesis: **A Survey on Autoencoders with focus on Online Signature Verification,** Under supervision of Dr. B. Babaali.	
	Allameh Helli High School, Diploma in Mathematics and Physics Discipline	2010 - 2014
	Affiliated with the National Organization for the Development of Exceptional Talents (NODET)	
	GPA: **19.2/20**	

Research Experiences	McGill University, **Knowledge Enhanced Software Connectivity Lab**	Jan 2019 - Now
	University of Tehran, **Online Signature Verification**	Jan 2017 - Dec 2017
	My research was focused on developing general-purpose frameworks for the verification tasks with deep models, especially by utilizing Recurrent Autoencoders and Siamese Networks.	
	University of Tehran, **Persian OCR**	Sep 2016 - Jan 2017
	Research assistant of Dr. B. Babaali. His research is focused on building robust systems for Persian OCR using deep models, especially by utilizing the Convolutional Recurrent Neural Network.	

Publications	[1] Kian Ahrabian and Bagher BabaAli. "Usage of autoencoders and Siamese networks for online handwritten signature verification". In: *Neural Computing and Applications* (2018). ISSN: 1433-3058. DOI: 10.1007/s00521-018-3844-z. URL: https://doi.org/10.1007/s00521-018-3844-z.

Teaching Experience (Teaching Assistant)	**COMP 303: Software Design,** McGill University	Winter 2019
	Bio-computing, University of Tehran	Fall 2017
	Logic Circuits 1, University of Tehran	Spring 2017
	Principals of Computer Systems, University of Tehran	Spring 2017
	Data Structures and Algorithms, University of Tehran	Spring 2017
	Data Structures and Algorithms, University of Tehran	Fall 2016
	Introduction to Computer Programming, University of Tehran	Fall 2016
	Advanced Programming, University of Tehran	Spring 2016

Awards and Honors	**Ranked 7th** in National Computer Science Master's Exam	May 2018
	Recipient of **University of Tehran Foundation Fellowship**	Sep 2015 - Jul 2018
	Ranked 13th, ACM ICPC Asia Tehran Regional Contest	Nov 2015
	Ranked 12th, ACM ICPC Asia Tehran Regional Contest	Dec 2014

Professional Experiences	Cafe Bazaar, **Tech Lead**	Feb 2018 - Jan 2019

As a tech lead, I was responsible for the technical growth of team members, assurance of projects quality, knowledge sharing, building comprehensive technical solutions and coordinating technical vision in collaboration with the tech leads of other teams.
- Led the recommendation team into building a scalable online recommender system with the ability to respond to thousands of requests on top of Kubernetes, Redis, and Django.
- Led the user behavior team into building a system for gathering and storing action logs generated by clients with the ability to build chain actions in an online and stateful manner for analyzing users behaviors on top of Apache Spark (Spark Streaming and Spark SQL), Apache Kafka, Apache Hadoop, and Scala.
- Led the big data task force into building a system for generating statistics based on the gathered data from clients on top of Apache Spark (Spark SQL), Apache Hadoop, and Python.

Cafe Bazaar, **Data Engineer**   Jun 2017 - Jan 2019

As a data engineer, I was responsible for building solutions for gathering, processing and storing data generated by clients and servers in collaboration with various teams in Cafe Bazaar on top of big data solutions such as Apache Hadoop and Apache Spark. Also, I was responsible for providing the infrastructure and tools needed by data scientist and business intelligence teams to analyze the stored data such as Apache Zeppelin and Apache Hive.
- Built the universal pipeline for gathering and storing data generated by clients and servers on top of Apache Kafka, Apache Hadoop, Python, and Golang.
- Built a system for gathering and storing users applications data on top of Apache Kafka, Apache Cassandra, S3 Object Storage, Apache Spark (Spark Streaming), and Scala.
- Setup multiple servers in a reusable manner with the business intelligence tools such as Metabase and Apache Superset on top of Docker.
- Setup multiple servers in a reusable manner with the big data tools such as Apache Cassandra, Apache Hadoop, Apache Hive, Apache Cassandra, and Apache Zeppelin on top of Docker.

Cafe Bazaar, **Software Engineer**   Sep 2015 - Jun 2017

As a software engineer, I was responsible for developing web applications in a full-stack manner for serving contents to end-users on top of Django, gRPC, Golang, Kubernetes, Docker, Redis, and PostgreSQL. Also, my responsibilities included maintenance of the codebase as the project owner. Besides, I was responsible for the maintenance and setup of the servers that run the projects.
- Built a system for calculating statistics based on the gathered and stored data on top of Apache Cassandra, Apache Hadoop, Apache Spark, Redis, Python, and C++.
- Built a scalable system for serving application updates with the ability to respond to thousands of requests in 1ms on top of the Kubernetes, Docker, Redis, gRPC, and Golang.
- Built a universal development kit for easing the process of software development by giving the developers the tools to manage different projects and their dependencies with a centralized interface on top of the Docker and Python.
- Built multiple micro-services as part of the developer's panel of Cafe Bazaar which handled the needs of the application developers such as product management in the marketplace, statistics visualization, and financial management on top of the Docker, Redis, PostgreSQL, S3 Object Storage, Django, and Python.

Skills

Programming Languages: Python, C/C++, Java, Scala, Golang, SQL

Libraries: Keras, Tensorflow, Theano, Apache Spark, SciPy, Django, gRPC, JSON-RPC

Tools: Git, Vim, LaTeX, PostgreSQL, Redis, Docker, Kubernetes, Apache Cassandra, Apache Hadoop, Apache Kafka, Nginx

Languages: English (Fluent), Persian (Native), French (Limited Knowledge)

Test Scores

TOEFL (17th September 2017) Total Score: **107/120**
Reading: 28/30, Listening: 29/30, Speaking: 23/30, Writing: 27/30

GRE (15th November 2017)
Verbal: 148/170 (39%), Quantitative: **170/170 (97%),** Analytical Writing: 3.0/6.0 (18%)

Memberships

University of Tehran, Computer Science Student Chapter   Sep 2016 - Jul 2018