SHAHRAM AKBARINASAJI

Toronto, ON   (437) ***-***8   sakbarin@sfu.ca

- Professional Master's in Computer Science (Big Data), Simon Fraser University.
- Solid understanding of machine learning algorithms to build predictive models.
- 10 years of experience in software development, database design, and data wrangling.
- Big Data Developer with a strong background in Spark, Hadoop, and MapReduce.
- Proficient in algorithm design and object-oriented programming.
- Hands-on data management systems both structured and unstructured.

SKILLS

Programming	Python, C#, VB, SAS, C, Git, Bash Script.
Big Data & Cloud	Google Cloud Platform, Apache Spark, Airflow, Hadoop, Docker.
Database	BigQuery, SQL Server, DB2, HDFS, Cassandra, Hive.
Data Analytics	Pandas, NumPy, Matplotlib, Seaborn, Tableau, Highcharts.
Machine Learning	Scikit-Learn, Factor Analysis, TensorFlow, Keras, PyTorch.
Web Design	ASP.NET, HTML, CSS, JavaScript, jQuery, BootStrap.

PROFESSIONAL EXPERIENCE

Tangerine Bank, Toronto, ON • *Data Scientist*   05/2021 - Now
- Organized weekly meetings with stakeholders to understand business problems, present the results, discuss blockers, and receive feedback to apply and optimize model performances.
- Built a Chequing cross-sell propensity model using **XGBoost** and **AI Platform** on a highly imbalanced dataset to help target high propensity customers which led to a 0.75% increase in the campaign response rate.
- Created a clustering model using **KMeans** and **Factor Analysis** to segment customers based on their life cycle features which helped to better understand the customer needs and enabled a client-first approach.
- Designed dashboards using Google **Data Studio** and **BigQuery** to visualize real-time and historical campaign performance.

Scotiabank, Toronto, ON • *Data Scientist, Pricing Analytics (COOP)*   09/2020 - 12/2020
- Developed an automated large-scale data pipeline to Extract, Transform, and Load (**ETL**) data from Enterprise Data Warehouse to GIC pricing model using **SAS**, **SQL, DB2**, **PySpark**, **Bash Script**, and **crontab**.
- Monitored weekly data pipelines to machine learning models, resolved the incurred data issues in the **ETL** process, and generated 2 new data features that helped to optimize customer clustering models.
- Performed Exploratory Data Analysis (**EDA**) on 7 years of GIC sales dataset to gain insights into customers' behavior on GIC laddering using **Python**, **Pandas**, **Matplotlib**, and **Seaborn**.

Iranian Offshore Oil Company, Tehran, Iran • *Web Application Designer and Developer*   03/2012 - 08/2019
- Interacted with stakeholders to get a high-level understanding of requirements, analyze requirements, and ensure alignment of requirements, application specifications, and database architectural design.
- Implemented 8+ web applications like SSO, Dashboard, Work Order Automation, Inventory Management, etc. for different business lines using **C#**, **ASP.NET**, **MVC**, **EntityFramework**, **LINQ**.
- Conducted data migration and Extract-Transform-Load (**ETL**) from legacy systems databases to the newly designed data models using SQL Server Integration Services (**SSIS**).

- Cooperated in the Key Performance Indicators (**KPI**) definition by writing **SQL** queries to aggregate data from multiple data sources and performing Exploratory Data Analysis (**EDA**) on the data using **Pandas**.
- Originated dashboards and reports to provide high-value information to stakeholders using **ASP.NET**, **C#**, **SQL**, **HighCharts**, **JSON**, **Stimulsoft Reports**, and **SQL Server Reporting Service (SSRS)**.

OSVEH Computer Consultants, Tehran, Iran • *Web Application Developer*   08/2010 - 02/2012
- Programmed core functionalities of 4+ web-based office automation applications and reports using **ASP.NET**, **C#**, **ADO.NET**, **HTML**, **CSS**, **JavaScript**, **BootStrap**, and **Crystal Reports**.
- Implemented 5+ database models and entities including tables, views, stored procedures, and functions in **MS SQL Server** as well as writing **SQL** queries to aggregate data for reports using **SSMS**.
- Generated 10+ **RESTful API**s using **C#** that enabled third-party applications to fetch real-time data.
- Instructed end-users regularly on using applications that aided them in leveraging features efficiently.

OSVEH Computer Consultants, Tehran, Iran • *Website Designer*   06/2009 - 07/2010
- Designed, developed, and improved websites' features continuously in collaboration with 4 developers.
- Leveraged **ASP.NET**, **C#**, **HTML5**, **CSS3**, and **Javascript** to design 5 cross-browser compatible websites.
- Redesigned and maintained 9 websites to align with requirements and capture new audiences.

ACADEMIC PROJECTS

HexaFace - A Deep Learning Web Portal for Facial Applications   02/2020 - 04/2020
- Constructed the VGG-Face model architecture and exploited the pre-trained weights to obtain 2622 facial features using **Python**, **TensorFlow**, and **Keras**.
- Formed a **Siamese Neural Network** to compute Cosine and Euclidean distance for face verification.
- Initiated a web portal using **Django**, **HTML**, **Bootstrap**, and **jQuery** and deployed 6 deep learning models.

Abstractive Text Summarization   11/2019 - 12/2019
- Preprocessed Amazon product reviews (+142M rows) and GigaWords (+4M articles) datasets using **PySpark**.
- Setup 2 models, a seq-to-seq stacked **LSTM** using **TensorFlow** and Microsoft **UniLM** model using **PyTorch**.
- Applied transfer learning, fine-tuned 3 hyperparameters, and tested models on GigaWords and Amazon reviews dataset which enabled us to evaluate ROGUE scores from different fine-tuning parameters.

EDUCATION

M.Sc in Computer Science, Professional Master's Program in Big Data   09/2019 - 04/2021
Simon Fraser University, Burnaby, BC

M.Sc in Information Technology, Multimedia Systems   09/2014 - 01/2017
Shahid Beheshti University, Tehran, Iran

B.Sc in Computer Science   01/2005 - 05/2009
Shahid Bahonar University, Kerman, Iran

CERTIFICATES

- Natural Language Processing with Classification and Vector Spaces
- Modernizing Data Lakes and Data Warehouses with GCP
- Google Cloud Platform Big Data and Machine Learning Fundamentals
- Complete Tensorflow 2 and Keras Deep Learning Bootcamp