AMIN FARVARDIN

Desired post: R&D position in Data Science | Data Engineer Young Doctor benefit from the CIR (research tax credit)

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K https://www.kaggle.com/aminfar

https://github.com/afarvardin
 https://git.lamsade.fr/afarvardin



ACTUAL SITUATION

Big Data Architect Certification - Online Courses (Instructor)

Université Paris-Dauphine | Tunis

☐ June 2021 - ongoing Paris, France

- Data Processing
 - Data lake / LakeHouse / Delta
- Stream Processing
 - Lambda and Kappa Architectures

Lecture and Research Assistant

LAMSADE, Université Paris-Dauphine

Sep 2019 − ongoing Paris, France

- Systemes de Langages de Programmation pour le "Big Data"
- Large Scale Machine Learning in Apache Spark
- Mise à niveau en Java
- Database (RDBMS)

EXPERTISE AND INTERESTS

Data Architecture

- Batch Processing, Stream Processing, Micro-Batch Processing
- Lambda and Kappa Architecture

Statistical Learning Basis

- Supervised Method: Linear regression, Logistic regression, SVM, KNN, PCA, Random Forest, Naive Bayes
- Unsupervised Method: k-means, Hierarchical Clustering, LDA
- Deep Learning: ANN, CNN

WORK EXPERIENCE

Data Science Pole in LAMSADE (Université-Paris Dauphine)

Data Streaming, Data Processing, Architecture Big Data

Mov 2016 - Dec 2020 Paris, France

Scalable Process of Streaming Massive RDF Data

- Devised, designed, and implemented a novel indexing technique in Spark Streaming for RDF saturation
- The proposed method is capable of identifying the relation of already past data with the current one
- Saturate Streaming RDF Incrementally
- Memory usage reduction by ${\sim}40\%$
- Improve execution time by $\sim 17x$
- Tuning the Spark Process and Partitions

Spark & Spark Streaming Kafka Scala Java Python (Pandas, NumPy) Hadoop Yarn HDFS

Azure Databricks AWS EMR/S3 Google BigQuery Apache Airflow

Full Stack Engineer

Text Mining

Identification and analysis of land studies in TERRE-ISTEX project.

- Identification and analysis of land studies
- Annotate spatial text geographically

- Querying annotated spatial text Text mining (GATE & GATE Embedded) **NLP RESTful API** Java Spring MVC Elasticsearch SQL NoSQL JS, HTML, CSS **Full Stack Engineer** Text Mining (Internship) # April - Sep 2015 ♥ Montpellier, France Semantic annotation associated with land development projects **NLP RESTful API** Spring MVC SQL JS, HTML, CSS Text mining (GATE & GATE Embedded) Java **Data Visualization** SIG L-R (Volunteer) # Feb - April 2015 Utilizing the registered participants' data to show what we can do with even none relevant data and how much knowledge potentially hidden in data **JSON** D3.js JS **Full Stack Engineer** Text Mining (Master Internship) m Jan 2014 - Jan 2015 Montpellier, France Semantic web services for opinion mining from land-use planning documents - Annotate text by creating NLP rules - Prepare a standalone pipeline Transform the standalone pipeline into a website application by utilizing GATE Embedded - Implement a web-tool for analyzing land-use planning documents Text mining (GATE & GATE Embedded) **RESTful API** ASP.NET MVC - C# NLP Spring MVC Java SQL JS, HTML, CSS Web Development on Azure Cloud Building a RESTful web service m Feb 2012 - July 2012 ♥ Hyderabad, India Design and implement a Phone-Book as a web service on Azure ASP.NET SQL **SOAP** Azure INDUSTRIAL EXPERIENCE **Software Engineer** Petroleum Industry ₩ Sep 2006 - July 2008 Shiraz, Iran Design, implement, and maintain the software (logistics, repairs) for Iran's petroleum industry. ASP.NET C# SQL **Back-end Web Developer** ESG Co. Ltd. **#** June 2004 - June 2006 Shiraz, Iran ASP classic **ASP.NET** HTML, CSS, JS CMS (dnn) **EDUCATION** Ph.D. in Streaming Big Data - LAMSADE (Université-Paris Dauphine)

Title: Scalable Saturation of Streaming RDF Data

Mov'16 - Jan, 2021Paris, France

We present the first solution for reasoning over large streams of RDF data using big data platforms. In doing so, we focus on the saturation operation, which seeks to infer implicit RDF triples given RDF schema or OWL-Horst constraints. Indeed, unlike existing solutions which saturate RDF data in bulk, our solution carefully identifies the fragment of the existing (and already saturated) RDF dataset that needs to be considered given the fresh RDF statements delivered by the stream. Thereby, it performs the saturation in an incremental manner.

Master (Information Technology, JNTU)

Project: Semantic web services for opinion mining from land-use planning documents

Sep 2012 - Oct 2014 Pyderabad, India

Grade: First Class with Distinction

Bachelor (Computer Engineering, JNTU)

Project: A Phone-Book as a web service on Azure

Sep 2008 - Jun 2012 Pyderabad, India

Associate's Degree

Computer Software Engineering

2001 - 2004Shiraz, Iran

STRENGTHS

• Development Languages, Frameworks, & DB

D: Scala JAVA Python (Pandas, NumPy) C# & VB.NET C

 $\underline{\textbf{F}}\text{:} \left(\text{Spark} \right) \left(\text{Hahoop Yarn} \right) \left(\text{Kafka} \right) \left(\text{Elasticsearch} \right) \left(\text{AWS EC2, EMR, S3 \& Lambda} \right) \left(\text{Airflow} \right) \left(\text{Docker} \right)$

Kubernetes | ASP.NET MVC | Spring MVC

DB: NoSQL (HDFS, MangoDB, AWS S3 & DynamoDB, etc.) MySQL, MSSQL RDF/XML

Skills

Stream & Batch Processing (Big Data) Scrum Text mining (NLP) GATE(GUI, Embedded) **NLP** Git Linux Spring MVC ETL concepts **Design Patterns RESTful & SOAP** d3.js **MTFX** JS, jQuery HTML5, CSS3 IIS, Glassfish 4.0

SOFT SKILLS

Adaptability Flexibility Responsibility Team Work Time management Work Ethic Leadership

Problem Solving Self-Motivation Listening Personal Development

PUBLICATIONS (TOP 5)

- 1. Farvardin MA., Colazzo D., Belhajjame K., et al. "Scalable Saturation of Streaming RDF Triples", TLDKS 2020 (Journal).
- 2. Farvardin MA., Colazzo D., Belhajjame K., et al. "Streaming saturation for large RDF graphs with dynamic schema information", DBPL 2019, Phoenix, AZ, USA.
- 3. Kergosien E., Farvardin MA., et al. "Automatic Identification of Research Fields in Scientific Papers", LREC 2018, Japan.
- 4. Farvardin MA., Kergosien E., Roche M., Teisseire M. "A Webtool for Analyzing Land-use Planning Documents.", ISWC (Posters & Demos) 2015.
- 5. Farvardin MA., Kergosien E. "Senterritoire for Spatio-Temporal Representation of Opinions", NLDB 2014.

HONERS & AWARDS

Full PhD Scholarship at Université-Paris Dauphine

Minister of High Education of France

Master II Scholarship in CIRAD

Minister of High Education of France

MCSD

Web Application (Credential ID: E326-9247)

2016

Paris, France

2014

♦ Montpellier, France

♦ Hyderabad, India

LANGUAGES

English French Persian

