Fuat Akal

AI Researcher & Developer

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SUMMARY

- Lifelong learner, self-motivated, and committed.
- Have a solid understanding of machine learning and deep learning algorithms.
- Have strong programming abilities, fluency in Python, and experience in the Pytorch framework.
- Have experience in working with microscopic and radiology images.
- Have a decade of experience in working with researchers from the healthcare and life sciences domains.
- Created machine learning models and developed Wed-based data science applications to facilitate the diagnosis of diseases.

WORK EXPERIENCE

Assistant Professor
Computer Engineering Department
Hacettepe University, Ankara, Turkey
July 2013 to Today

Have been working on data science and machine learning for the last four years. Primarily interested in applied AI in healthcare. Building easy-to-use machine learning-based applications to facilitate physicians' tasks for diagnosing and treating diseases and interpreting images, e.g., microscopic, radiology, etc. Work closely with people from medicine and the life sciences domain for quite a long time.

Scientific Staff
Functional Genomics Center Zurich
University of Zurich, Switzerland
February 2008 to July 2013

Worked on the design, development, and maintenance of B-Fabric, which is an open-source platform for data and application integration in the life sciences domain. Helped life science professionals understand and use the B-fabric platform. Development activities on this infrastructure require knowledge of several software technologies like Enterprise Java Beans, SQL, JBoss Seam, Apache Lucene, ActiveMQ, etc.

Post-Doc Researcher
Computer Science Department
University of Basel, Basel,
Switzerland

Continued his work on data and replication management in the Grid. Designed and developed WSRF-compliant web services based on Globus Toolkit and Java. Worked as the work package leader within an EU-funded project.

Visiting Researcher
Institute of Information Systems
University of Health Sciences,
Medical Informatics and Technology
(UMIT), Hall in Tirol, Austria
April 2005 to March 2006

Started working on digital libraries and grid computing. Worked on an EU-funded project named DILIGENT which pursued building digital libraries atop data grids. He mainly focused on data management issues in the Grid.

Researcher, PhD Candidate
Swiss Federal Institute of Technology
(ETH Zürich)
Institute of Information Systems
December 2001 - March 2005

Studied database clusters, replication schemes, and query processing. Designed and developed a distributed cluster coordination infrastructure with C++. Gained significant experience in relational databases and SQL. Focused on design, scalability, and availability of database clusters.

TECHNICAL SKILLS

Machine Learning, Deep Learning, Computer Vision, NLP, Big Data Analytics, Data Science, Databases, Distributed Systems, Software Development, Algorithms, Web Programming, Cloud Computing.

- Programming: Python, Java, C/C++, SQL
- Machine Learning: Sci-Kit Learn, Pytorch
- Web: PHP, JavaScript, XML, JSON, Bootstrap, CSS
- Database: MySQL, Postgresql, Microsoft SQL Server, Oracle, DB2
- Big Data: Hadoop, Hive, Impala, BigQuery, Spark
- Cloud: AWS, Google Cloud

EDUCATION

PhD, 2007 Swiss Federal Institute of Technology (ETH), Zurich, Switzerland
Thesis: "*Replication in a Database Cluster with Freshness and Correctness Guarantees*"

MSc, 2000 Hacettepe University, Computer Science Department, Ankara, Turkey
Thesis: "*Concept Based Turkish Search Engine*"

BSc, 1996 Hacettepe University, Computer Science Department, Ankara, Turkey

COURSES & CERTIFICATIONS

- AWS Academy Graduate - AWS Academy Machine Learning Foundations
- PyTorch Fundamentals, Microsoft Learn
- IBM Data Science Specialization - Coursera DREF9VHU7MUH
- Machine Learning with TensorFlow on Google Cloud Platform Specialization - Coursera XGUSRDG4DJAP
- AI in Healthcare Specialization - Coursera FECTHGL9GDWK
- Deep Learning Specialization - Coursera NN47DQFLVVMH
- AI for Medicine Specialization - Coursera E7XSBJLPMQ2L
- Natural Language Processing Specialization - Coursera VR6PQGNBACG5
- Practical Data Science on the AWS Cloud Specialization - Coursera C9BSKJKUGLSA
- Google Cloud Fundamentals: Core Infrastructure - Google Cloud Skills Boost 2635588

REFERENCES

Will be provided upon request.