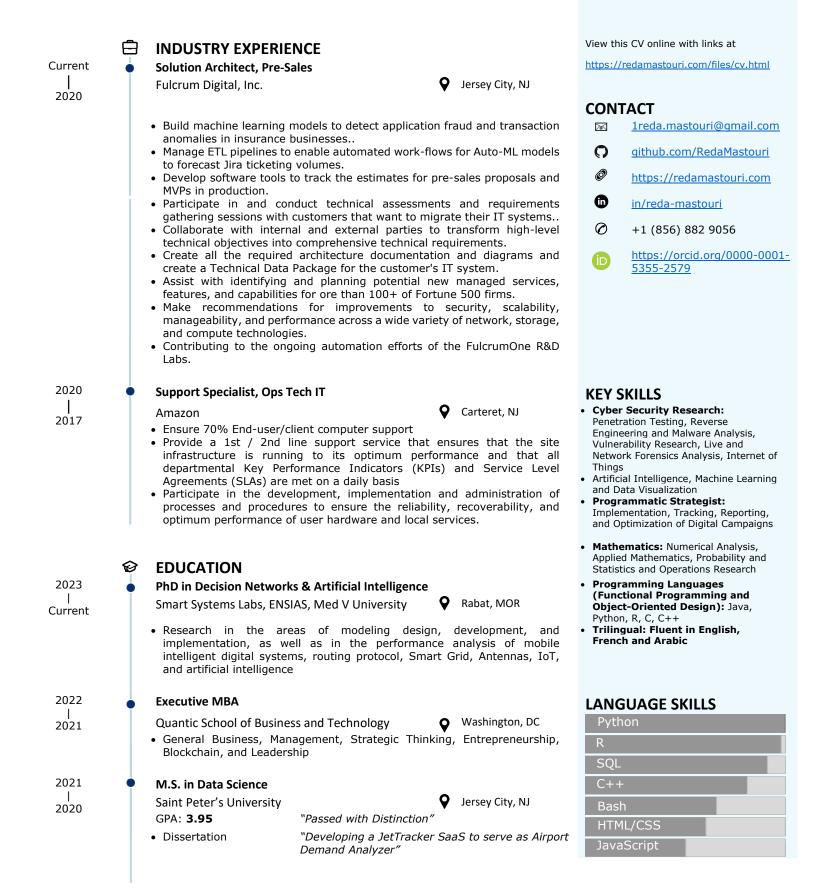# REDA MASTOURI

Data Scientist with a passion for teaching and coaching.
| Data Analytics | Statistics | Machine Learning | Predictive Modeling | Data Visualization | NLP |
Network Analytics | Network Security | Software Engineering | Ethical Hacking |

Versitile Information Technology Professional and Research Scholar with 9 years experience in teaching, tutoring and mentoring, and training college level students. Additional hands-on experience in the implementation, administration, support and troubleshooting of networked LANs/WLANs. Strong organization and critical thinking skills, and proven ability to multi-task.

💼 INDUSTRY EXPERIENCE

Solution Architect, Pre-Sales

Fulcrum Digital, Inc. — 📍 Jersey City, NJ

Current | 2020

- Build machine learning models to detect application fraud and transaction anomalies in insurance businesses..
- Manage ETL pipelines to enable automated work-flows for Auto-ML models to forecast Jira ticketing volumes.
- Develop software tools to track the estimates for pre-sales proposals and MVPs in production.
- Participate in and conduct technical assessments and requirements gathering sessions with customers that want to migrate their IT systems..
- Collaborate with internal and external parties to transform high-level technical objectives into comprehensive technical requirements.
- Create all the required architecture documentation and diagrams and create a Technical Data Package for the customer's IT system.
- Assist with identifying and planning potential new managed services, features, and capabilities for ore than 100+ of Fortune 500 firms.
- Make recommendations for improvements to security, scalability, manageability, and performance across a wide variety of network, storage, and compute technologies.
- Contributing to the ongoing automation efforts of the FulcrumOne R&D Labs.

Support Specialist, Ops Tech IT

Amazon — 📍 Carteret, NJ

2020 | 2017

- Ensure 70% End-user/client computer support
- Provide a 1st / 2nd line support service that ensures that the site infrastructure is running to its optimum performance and that all departmental Key Performance Indicators (KPIs) and Service Level Agreements (SLAs) are met on a daily basis
- Participate in the development, implementation and administration of processes and procedures to ensure the reliability, recoverability, and optimum performance of user hardware and local services.

🎓 EDUCATION

PhD in Decision Networks & Artificial Intelligence

Smart Systems Labs, ENSIAS, Med V University — 📍 Rabat, MOR

2023 | Current

- Research in the areas of modeling design, development, and implementation, as well as in the performance analysis of mobile intelligent digital systems, routing protocol, Smart Grid, Antennas, IoT, and artificial intelligence

Executive MBA

Quantic School of Business and Technology — 📍 Washington, DC

2022 | 2021

- General Business, Management, Strategic Thinking, Entrepreneurship, Blockchain, and Leadership

M.S. in Data Science

Saint Peter's University — 📍 Jersey City, NJ

2021 | 2020

GPA: **3.95** — *"Passed with Distinction"*

- Dissertation — *"Developing a JetTracker SaaS to serve as Airport Demand Analyzer"*

View this CV online with links at

https://redamastouri.com/files/cv.html

CONTACT

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- github.com/RedaMastouri
- https://redamastouri.com
- in/reda-mastouri
- +1 (856) 882 9056
- iD https://orcid.org/0000-0001-5355-2579

KEY SKILLS

- **Cyber Security Research:** Penetration Testing, Reverse Engineering and Malware Analysis, Vulnerability Research, Live and Network Forensics Analysis, Internet of Things
- Artificial Intelligence, Machine Learning and Data Visualization
- **Programmatic Strategist:** Implementation, Tracking, Reporting, and Optimization of Digital Campaigns
- **Mathematics:** Numerical Analysis, Applied Mathematics, Probability and Statistics and Operations Research
- **Programming Languages (Functional Programming and Object-Oriented Design):** Java, Python, R, C, C++
- **Trilingual: Fluent in English, French and Arabic**

LANGUAGE SKILLS

- Python
- R
- SQL
- C++
- Bash
- HTML/CSS
- JavaScript

- Capstone Project *"Examination of Digital Community Conversations Within Specific Disease States Via Reddit"*

2020
|
2017

B.A. in Applied Mathematics and Computer Sciences

NJIT & Rutgers University 📍 Newark, NJ

GPA: **4.0** *"Summa Cum Laude"*

- Scholarships
  - Awarded the Rutgers University–Newark Talent and Opportunity Program (RU-N to the TOP) Full Scholarship
  - Scarlet Promise Grant
- Dean's list
  - Fall'16, Spring'17, Fall'17, Spring'18, Fall'18, Spring'19, Fall'19, Spring'20

2013
|
2010

M.Eng. in Telecommunication and Network Engineering

Cadi Ayyad University 📍 Marrakech, MOR

</> SELECTED CODE REPOSITORIES

2021

PatientCom **- Smart Reddit Data-Driven App**

Saint Peter's University 📍 Jersey City, NJ

- Development of a repeatable process for the analysis of Reddit conversations within specific condition and/or disease state with applicable threads and subreddit threads (subreddits) to potentially inform strategy and content development. Create a simplified and repeatable process that does not require the users to be fluent in Reddit.

2021

Optimal Transport **- Stochastic Gradient Descent-Based Financial Models (SGDBF)**

New York University 📍 New York, NJ

- A new method is proposed for the solution of the data-driven optimal transport barycenter problem and of the more general distributional barycenter problem that the article introduces. The method improves on previous approaches based on adversarial games, by slaving the discriminator to the generator, minimizing the need for parameterizations and by allowing the adoption of general cost functions. It is applied to numerical examples, which include analyzing the MNIST data set with a new cost function that penalizes non-isometric maps.

In my free time, I enjoy working with friends, peers, and colleagues on algorithm designs/implementations. Recently, we built data frame and decision tree classes in C++ and Python.

👩‍🏫 TEACHING EXPERIENCE

Current
|
2017

STEM and Business Tutor

Hudson County Community College 📍 Jersey City, NJ

- Polish student's performance to become independent learners
- Develop comprehensive lesson plans that accommodate specific level of learners
- Boost accuracy by refining test-taking strategies and methods
- Accelerate problem solving by teaching reliable shortcuts

I am passionate about teaching and helping others. It brings me joy and satisfaction to teach others new skills.

2020
|
2018

Math, Business and Sciences Peer Educator

Rutgers University 📍 Newark, NJ

- Assist students in acquiring a better understanding in Numerical Analysis, Differential Equations, Calculus I, II and Calculus III, Intensive Programming and Data Structure.
- Help students develop study skills and techniques to help improve their academic performance
- Coordinate with multiple students creating a well - rounded and engaging environment
- Specialized as an individual tutor by simplifying math concepts while coaching students to think critically to solve problems
- Conduct comprehensive test review sessions which contributes to an increase of more than 25 percent in some students' grades
- Assist students in acquiring better understanding of targeted weak areas within a subject or a subject as a whole
- Write individual tutoring plans in accordance to the individual needs of students

2016
|
2015

Mathematics and Programming Languages Tutor

Varsity Tutors   New York, NJ

- Raised test scores by more than 10% by tutoring Math and other subjects such as Programming, Networking, French, Calculus [I, II, III], Differential Equation, Linear Algebra, Research & Analytics

PROFESSIONAL DEVELOPMENT/AFFILIATIONS

2020

Fellow, (Post Career Accelerator Program for Minorities

Braven   Newark, NJ

- Built a prototype of a mobile application for Panasonic that received 95% approval ratings for its beta trial.
- Conducted empathy-based research with four individuals to better understand their pain points.

2019

Fellow, (National Search Foundation)

Garden State LSAMP (Louis Stokes Alliance for Minority Participation)   Newark, NJ

- Awarded the National Search Foundation for cyber-security Web Vulnerability assessment research.
- Published 2 peer-reviewed research articles for Rutgers' NCAS research center

2020

Fellow, (Mentor Coaching)

America Needs You   Jersey City, NJ

2017

College Student Success Mentor

Hudson County Community College   Jersey City, NJ