Summary I started my career towards data science as a data entry clerk in 2010. The job was quite simple: read ~1k handwritten *SQL SELECT* Statements and enter the statements as strings into a comma delimited file. Doing so made me familiar with the Syntax of SQL and interested in databases. Later and as a data analyst (2013) and in the same project, one of my responsibilities was to report on the correctness of both semantic and syntax aspects of these SQL statements. I completed a PhD degree in data analytics in that area later (2017) where I explored pros and cons of many techniques that I borrowed from statistics and informational retrieval to machine learning and knowledge discovery, to analysis complex networks of data. Ever since, I have been extensively applying those techniques to workplaces where there is a value for data science and data-driven solutions.

Career history Research Fellow in Data Science at Connected Intelligent Centre, University of Technology Sydney

March 2021 – January 2023

This data science intensive role was largely focused on advancing learning analytics research through the use of labour insight and occupational data analytics to improve university outcomes.

Key responsibilities: Actively engage with university’s different stakeholders to help them with their data/analytics needs

* **Tags:** Big data, AWS, Burning Glass (Lightcast), APIs, R, Shiny Dashboard, Skills Analytics, RecSys, Occupation Trajectory Analysis, UTS TRACK

Achievements

* Apply the state of the art research in skills analytics to measure skills gap across entire university’s curricula

Research Fellow at Macquarie University, Sydney

March 2019 – March 2021

Bringing artificial intelligence, text mining and machine learning, and data science to EdTech.

Key responsibilities

* Translate industry partner’s EdTech needs to research problem and provide research-based solutions as well as consultation

Achievements

* Designed, implemented, and evaluated a teacher training professional development program in delivering technology-enhanced pedagogy
* Design, implementation and evaluation of multiple natural language processing and text mining toolkits in RapidMiner for Virtuoso, a webtool designed for delivering educational content to high school students. The toolkit provides automated feedback on student’s homework, comments, and test results to the teachers.

Casual Academic at School of Software, University of Technology Sydney

July 2011 – March 2019

Activities mainly included lecturing and coordination of different teaching units (databases, and programming) offered at School of Software, as well as other forms of activity such as tutoring, lab assisting, marking, and helping students with special needs.

Key responsibilities

* Delivering teaching content and assessment design solutions

Achievements

* High score in student feedback survey collected from my past (4,000) students

Education PhD in Software Engineering from University of Technology Sydney

Graduated 2017

Master of Information Technology from University of Technology Sydney

Graduated 2013

Key skills Confident in processing, analysing, visualising, and interpreting different types of data, as well as aggregated data in other structures (anthologies, taxonomies, API request results, etc). Strong communication, project leadership skills, and work ethics.

Knowledge Data science, Artificial Intelligence, Machine learning, Research, Solution Design

Programming Grand master in R (600+ libraries), Python, MATLAB, SQL, shell and bash scripting, and Java

Tools RapidMiner, Pos, AWS, PowerBI, conventional and unconventional databases

References Available upon request.