

# Amir Kiani

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## SUMMARY

Self-driven and self-learner with a work ethic based on a strong desire to exceed expectations and a proven ability to meet tight deadlines, multi-task and prioritize workload. With great passion for analytics, I have experience in designing and developing code to conduct large scale data analysis to support business decisions. My diverse qualitative and quantitative background makes me a strong problem solver with a holistic perspective in approaching problems of various scales and types.

## PROFESSIONAL EXPERIENCE

### Data Analyst

**Nov 2023 - May 2024**

University of Calgary, Calgary, AB (full-time, contract)

- Utilized the Machine Learning and Advanced Research Computing (ARC) cluster at the University of Calgary to optimize and run algorithms to schedule final exams for over **100,000** student per year
- Developed and implemented automated solutions in Python, Java, VBA, and Excel for data analysis and data mining to enhance derive insights and efficiency in scheduling, calendar, and registration-related issues, leading to a **55%** reduction of scheduling errors and over **80%** reduction on manual workload and data entry
- Utilized SQL to query from over **100** tables to conduct thorough quality assurance checks and registration analytics, demonstrating expertise in writing and tuning SQL scripts
- Crafted custom scripts for the Scheduling team to perform audit on scheduling, calendar, and student data provided by over **6** faculties, demonstrating strong ability to develop meaningful, repeatable, and consistent quality checks throughout the development process
- Led and collaborated with **4** cross-functional teams and over **12** departments to deliver technical support and custom-built programs for scheduling final exams and space utilization
- Crafted business briefings and reports, and presented insights to over **35** stakeholders

### PhD Researcher (full-time, contract)

**Sep 2019 - Jul 2023**

Department of Philosophy, University of Calgary, Calgary, AB (Full-time, Contract)

- Taught **4** courses to over **1500** students in person and online
- Analyzed data from over **400** students using Python to identify performance patterns based on various factors, yielding insights for academic improvement strategies
- Developed automated grading systems in Excel, streamlining the grading process and reducing manual workload by **50%**
- Utilized statistical techniques to conduct in-depth analyses of educational data, resulting in actionable recommendations for curriculum enhancement for Logic I
- Secured over **\$50,000** in research funding through successful grant proposals, demonstrating strong analytical and communication skills in grant writing and project management
- Published and referred papers in over **4** leading international journals

### Consultant and Data Analyst

**Sep 2019 - Aug 2021**

Fanavaran Novin Eade Sepand Inc. (part-time, contract)

- Analyzed sales data using SQL queries, extracting insights into customer preferences and product trends, resulting in a **10%** increase in sales revenue
- Developed and deployed machine learning models to optimize contract evaluation and bidding strategies, resulting in a **15%** improvement in contract win rate

- Collaborated with cross-functional teams to develop data-driven solutions, contributing to a **20%** reduction in operational costs
- Conducted comprehensive data analyses and prepared detailed reports for stakeholders, facilitating informed decision-making
- Implemented data quality checks and validation processes to ensure the accuracy and reliability of analytical findings

#### Research Associate and Instructor

Jul 2018 - Jun 2019

University of Tartu (part-time, contract)

- Collaborated research with a team of **6** researchers working on the nationally acclaimed project *Expertise and Fundamental Controversy in Philosophy and Science* (MOBTT45)
- Contributed to the publication of over **15** papers and book chapters in prestigious venues
- As the main instructor taught a graduate course titled *Modal Logics: A Semantic Approach* (FLFI.04.076)
- Designed a graduate-level course syllabus, and over **40** quizzes for a class comprised of **15** master's and PhD students from diverse backgrounds, including Mathematics, Philosophy, and Linguistics
- Designed over **30** class worksheets and handouts and held in-person, after-class meetings with students to address their learning needs
- Guided and supervised students' end-of-semester projects and organized a **2**-day seminar for students to present their final projects

#### Data Collector and Analyst

May 2016 - Jul 2016

Scuola Normale Superiore (part-time, contract)

- Collected and phonetic data from a diverse cohort of over **30** participants
- Utilized Excel to analyze data, employing advanced statistical techniques to clean and visualize collected data effectively
- Collaborated with research team members to interpret findings and identify key insights
- Co-presented the research results at a prestigious international conference

### EDUCATION

#### Data Science Diploma

2023

BrainStation (Online)

- Mastered advanced data wrangling, database querying, statistical analysis, and ML
- Utilized SQL for database querying and Python machine learning libraries to carry out over 7 hands-on machine learning and data analysis projects

#### PhD in Mathematical Philosophy and Logic (GPA: 4/4)

2023

University of Calgary, Calgary, AB

- Thesis Title: The Mathematical Logic and Metaphysics of Ramified Type Theory
- Supervisor: Richard Zach
- Awarded 5 scholarships and grants, worth over \$50,000
- Taught and provided support in 4 courses for over 1500 students individually and in collaboration with other instructors
- Taught over 4 courses, and led and participated in reading groups and research activities regarding AI Safety and IT Ethics

#### MA in Philosophy and AI (GPA: 4/4)

2019

Department of Philosophy, University of Tartu, Tartu, Estonia

- Thesis Title: Perception, Abductive Methodology, and Compositional Universalism
- Supervisor: Juhani Yli-Vakkuri

- Learned advanced research techniques and methodologies, as well as qualitative and analytical skills
- Participated in courses and composed research papers on AI consciousness, animal intelligence and the philosophy of mind
- Awarded over \$24,000 worth of scholarships
- Received recognition for producing the best thesis proposal of the year, from among 20 MA students

## BSc in Mathematics

2017

Amirkabir University of Technology, Tehran, Iran

- Thesis Title: Logics for Coalgebras, and a Final Coalgebra Theorem
- Supervisor: Massoud Pourmahdian
- Acquired advanced theoretical and working knowledge of statistics and statistical analysis
- Utilized mathematical software and tools, such as R and MATLAB, for various class projects

## SKILLS

**Programming Languages:** Python, R, Java, Bash, VBA

**Databases:** Oracle, MSSQL, MySQL, PostgreSQL, ETL

**Data Visualization:** Tableau, PowerBI, Excel, Matplotlib, Plotly, Seaborn, Dashboards

**Cloud and Big Data:** AWS, [GCP](#), Hadoop, Hive, Spark

**Statistical Analysis:** Statistical Modeling, Causal Inference, Hypothesis Testing, A/B Testing, ANOVA

**Web Scraping:** BeautifulSoup, Scrapy, Selenium

**Deep Learning:** TensorFlow, Keras, PyTorch

**NLP:** NLTK, spaCy, HG Transformers

## PROJECTS

**DeepAnalytic** 2024

- Creating expert philosopher chatbots using advanced RAG on over **18,000** academic papers

**DeepChef** 2023

- Scraped over **520,000** recipes from food.com and engineered a recipe recommender system

**Google - BrainStation Hackathon** 2023

- Led a winning team of **5** to research public trust in AI by harnessing the power of LLMs

## PUBLICATIONS

- Kiani A. [Structured propositions and a semantics for unrestricted impure logics of ground](#), *Synthese*, V 201: 141 (2023).
- Kiani A. [No Bullsh\\*t Math for Data Science: Your Comprehensive, Short and Sharp Introduction to the Mathematics of Data Science](#), Amazon KDP (2023)