

Gurvir Dhillon

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PROFILE

Result-driven data engineer with a passion and background in Artificial Intelligence and Software Engineering with hands-on experience of machine learning and predictive modeling. Skilled in accessing large complex datasets and uncovering insights into data. Known for a detailed-oriented approach, problem solving capabilities and effective team working abilities. Eager to apply technical expertise and analytical skills to solve real-world business challenges and contribute to the success of an organisation. Committed to continuous learning and adopted a growth mindset, actively seeking new challenges.

EDUCATION

**MSc, Artificial Intelligence, Royal Holloway
University of London**

September 2024 - September 2025

- Leveraged statistical techniques and python libraries (NumPy, Pandas, Matplotlib) to analyse and visualise large datasets, supporting data-driven decision-making. Familiarity with Jupyter Notebook.
- Autonomous systems: Gained hands-on experience in model intelligent behaviour using planning domains such as PDDL, FDR and STRIPS.
- Business intelligence systems: Uncovered strategies businesses use to assist with the decision-making process with the power of AI, an understanding behind the ETL process, dimensional modelling and data warehousing.
- Computational finance: Learnt machine learning techniques used to optimise portfolio management, risk assess and to help with financial forecasting with increased accuracy.
- Ethical considerations: Researched the ethical considerations such as data governance, bias mitigation and the role of accountability in machine learning systems.
- Modules included data analysis, computational programming, artificial intelligence principles and techniques, reinforcement learning.

BSc Software Engineering, University of Portsmouth

September 2020 - June 2023

- Database Management: Designed and optimised relational databases using SQL, improving performance through indexing and query tuning. Built data pipelines and managed unstructured data with NoSQL tools like MongoDB.

- **Software Development:** Experienced in the software development lifecycle, using JavaScript to build dynamic applications independently and in teams. Maintained code quality with unit testing, version control, and deployment.
 - Experience with Git/GitHub
 - Understanding on continuous integration/continuous development processes
 - Usage of test driven development
- **Project Management:** Led a project from planning to delivery using Agile tools like GitHub Kanban. Tracked progress, mitigated risks, and ensured milestones were met through continuous stakeholder communication.
- **Ambient assisted learning project:** developed an assisted living application to aid the elderly with day to day activity, had showcased project management skills and the ability to take on feedback, version control management tools such as Git and GitHub.
- **Networks understanding:** Gained theoretical knowledge of network protocols and simulating networks with an understanding of the various types of networks available.

Khalsa Secondary Academy

September 2014 - June 2020

A Level - Psychology(C), BTEC - Informational Technology (Distinction), BTEC - Business Studies(Merit)

11 GCSES including Maths, English language/literature and Information Technology(Grades 4-5)

WORK EXPERIENCE

Data Engineer, Digital Futures

September 2025 - Present

- **Tableau:** Built interactive dashboards and visualisations to communicate key insights from large corporate datasets and support business decision making
- **MS Excel:** Utilised advanced excel functions for data cleansing, to help with the ETL process.
- **Pytest:** worked on automated testing environment and code driven development
- **Webscraping:** used libraries such as beautiful soup and requests to gain key information from websites, a crucial role in data engineering.
- **Amazon Web Services (AWS):** Hands-on experience with EC2, networking, and database management via Whizlabs sandbox labs.
- **Windows Subsystem Linux:** Configured and operated a Linux environment on a windows shell script to execute scripts using touch, nano.
- **GenAI services:** Contributed to a team led hackathon to create a Pocket-AI therapist.

Coding Tutor for 8-10 year olds(freelance)

May 2024 - November 2024

- Mentorship: Proactively built a rapport with students to boost confidence through their coding exercises, tailoring teaching methods to suit the individual's learning style.
- Creativity: Designed fun and engaging lessons for students to facilitate the learning of coding.
- Innovation: Introduced different ways to teach students fundamental coding concepts through the use of games and fun activities.
- Initiative: Took the initiative to provide support to students that were currently struggling in their coding class by providing further guidance and facilitating learning in a better way to suit the student.

Barista, Costa Coffee

September 2023 - September 2024

- Demonstrated ability to work under pressure: Managed high customer volumes of 50-100 customers per hour during peak times.
- Time management: Proved the ability to efficiently manage time ensuring all tasks were completed in a timely manner such as replenishing stock, order preparation and maintaining cleanliness.
- Adaptability: Quickly adapted to a range of changes within the workplace such as learning new seasonal beverages to change within the current system.
- Leadership Skills: Guided new team members by aiding with the training process on Costa's standardised procedures.

Junior software developer

Go-Check-It July 2023 - September 2023

- Technical proficiency: Utilised Javascript to develop and maintain the front-end enabling seamless user experience and responsiveness.
- Continuous learning: Expanded knowledge in the development process by logging previous mistakes and looked for ways to further optimise the code.
- Problem solving: Effectively diagnosed and resolved a range of technical issues and deployed efficient solutions to increase user experience and user satisfaction.

Junior tester and UX intern, Slide Travel

May 2021 - October 2021

- Attention to detail: Had conducted thorough testing to identify bugs and usability issues whilst making sure the application had met high quality standards.
- Collaboration and Communication: Collaborated with developers to refine features and resolve key issues, effectively sharing testing results and user feedback to enhance product quality.

- Analytical Thinking: Analysed user behaviour to identify patterns and drive design decisions which improved usability and functionality.
- Critical thinking; Assessed complex user feedback and compared it to the testing outcomes to propose potential solutions to enhance the user experience.

Administrative assistant, D & B Crash repairs

June 2017 - September 2019

- Organisation skills: Demonstrated strong organisational skills by managing paperwork for deliveries and repair orders systematically.
- Invoice management: Ensured all data placed was accurate and had reflected the documentation provided by the car part providers.
- Interdepartmental communication: Ensured seamless communication between departments.
- Data entry management and record keeping: Had managed invoices by inputting the required details into the record management system whilst being aware of the accuracy.

Training and certifications

Ethics of AI - University of Helsinki

Data Engineering - Amazon Web Services

Agile Explorer - IBM SkillsBuild

Cybersecurity Fundamentals -IBM skills builder

Extra-Curricular Activities

Advanced Topics: Attended extracurricular seminars led by industry experts, gaining valuable insights into various data-related topics and emerging trends within the field.

ACCU Conference 2023

Public Speaking: Handpicked as one of five students from a cohort of 70 students to present at the ACCU Conference 2023. Delivered a successful presentation on software addiction to an audience of 250 industry experts in the technology field. Gained valuable insights into the field of technology.

Hacking 4 MoD:

Partnered with the Royal Navy to tackle a highly complex everyday problem. Conducted over 45 in-depth interviews over 12 weeks, gathering critical insights and developing innovative solutions to address key challenges.

REFERENCES AVAILABLE ON REQUEST