JUNGYUN KIM

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Motivated, collaborative data analyst with software engineering experience and a passion for machine learning. (Portfolio)

EDUCATION

Columbia University, School of Engineering and Applied Science

B.S. in Computer Science

- GPA: 3.8 / Dean's List (All eligible semesters)
- Relevant Coursework: Data Structures, Advanced Programming, Databases, Discrete Mathematics, Linear Algebra, Natural Language Processing, Artificial Intelligence, Deep Learning for Computer Vision

WORK EXPERIENCE/LEADERSHIP

Data Analyst Research Assistant, DitecT Lab

- Processed and analyzed ~120 million MTA subway ridership records (2021–2025) in BigQuery, optimizing SQL queries to aggregate daily, weekly, and monthly trends for congestion pricing impact analysis.
- Performed cyclical detrending and time series modeling in Python to isolate post-COVID recovery effects from policydriven changes, improving the clarity of results by removing repetitive hourly and weekly patterns.
- Developed interactive Tableau dashboards to visualize ridership trends and highlight actionable insights for stakeholders, reducing manual reporting time and enhancing data-driven decision-making.

Research Assistant, Columbia Business School (Marketing Division)

- Developed an end-to-end pipeline leveraging Python and the Meta Graph API to gather and analyze 10,000+ Facebook advertisement comments, integrating the OpenAI API for advanced NLP insights.
- Automated ad deployment and setup across multiple Facebook accounts via Python scripts interfacing with the Meta Marketing API, reducing manual ad configuration time by 90%.
- Performed comprehensive data analysis and visualization using Python (Pandas, Matplotlib) and R, uncovering statistically significant patterns in user engagement and political stance.

Teaching Assistant, Columbia University

- Assisted Professor Daniel Bauer in Introduction to Python, a 300+ students class required for all engineering students.
- Led weekly office hours, collaborated with 9 teaching assistants to run review sessions, graded assessments and exams.

APPLIED PROJECTS

Through the Eyes of AI: Brand Perception of Robotaxis in LLM Search

- Analyzed how major autonomous driving companies (e.g., Waymo, Cruise, Tesla) are portrayed in AI-driven "search," providing data-backed insights for optimizing LLM-based SEO strategies.
- Built a Python-based data pipeline (pandas, TextBlob, CountVectorizer) that handles API integration, text cleaning, sentiment scoring, and keyword extraction, ensuring consistent data quality from raw LLM responses.
- Produced multi-chart visualizations (radar, pie, bar, word cloud) in matplotlib, identified terminology-specific biases ("robotaxi" vs. "driverless car"), and recommended LLM SEO optimizations to enhance brand positioning.

Java Spring Boot Developer, LiveSched

Scheduling and Resource Management Service for First Responders (ER)

- Architected and deployed scalable RESTful APIs using Java and Spring Boot that dynamically adjusts schedules based on real-time data, specifications, and prioritization rules to maximize resource utilization.
- Wrote unit tests to reach overall branch coverage of +70%; tested end points using Postman; built a CI/CD pipeline to manage development; deployed using google cloud platform (GCP).
- Led a 4-person Agile development team, conducting bi-weekly sprints while maintaining a shared codebase using Git.

TECHNICAL SKILLS

Programming Languages: Python, SQL, R, Java, C, HTML/CSS

Databases & Cloud: SQL (PostgreSQL), Google Cloud Platform (BigQuery, GCS)

Others: Tableu, Git, Jupyter Notebook, Postman, Jira, Microsoft Office (Excel)

Aug 2022—Present (Exp. Graduation: 2026)

Feb 2025—Present

Jun 2024—Present

Aug 2024—Dec 2024