

JULIO CORNEJO

(708)-673-2228 jcorne23@illinois.edu [LinkedIn](#) [GitHub](#)

EDUCATION

Bachelor of Science in Computer Engineering, Business Minor Graduated May 2025
University of Illinois at Urbana-Champaign Cumulative GPA 3.22

Certifications: AWS Cloud Practitioner (2025), Google IT Coursera (2020), AWS Data Engineer Associate (IP)

TECHNICAL SKILLS

Databases: SQL (PostgreSQL, MySQL, MariaDB, Microsoft SQL Server), NoSQL (MongoDB, DynamoDB, Neo4j, BigTable), PySpark, Pandas, PyMongo, ETL Pipelines, Data Modeling

Cloud Engineering: AWS (S3, EC2, Lambda, API Gateway, SQS, DynamoDB, Route 53, VPC, CloudWatch, QuickSight), TCP/IP concepts GCP, Azure DevOps, Tableau, Palantir Foundry

Programming and DevOps: Python, C++, C, JavaScript, Bash, Flask, Node.js, HTML/CSS, Docker, Kubernetes, Git

General Engineering: SystemVerilog, RISC-V, FPGA Design (Quartus), QEMU, KiCad, Hardware Debugging, Spanish

WORK EXPERIENCE

Data Engineering Intern, Oak Street Health May 2024 – Aug 2024

- Scripted stored procedures in Microsoft SQL Server for clinic expansion in the DEV database, with deployment
- Resolved technical debt tickets in Azure DevOps, focusing on data cleanup in Microsoft SQL Server
- Tested ideas for data automation through job creation and alert systems while integrating Palantir Foundry

Residential Advisor, University Housing Aug 2024 – May 2025

- Supervised a community of 50 residents through conflict mediation, event planning, and crisis response
- Guided residents through campus resources and services in one-on-one conversations and effective bill-boarding

AI Trainer, Data Annotation Tech May 2024 – Jul 2025

- Enhanced the performance of AI coding models by analyzing and refining outputs, ultimately improving accuracy
- Contributed to code debugging, refactoring, and performance optimization for Python libraries

PROJECTS (4/6)

AWS RESTful Feedback Analytic System Aug 2025 – Sept 2025

- Deployed a portfolio site on S3 with Route 53 DNS inside a subnetted VPC, version-controlled with Git
- Built a serverless pipeline where API Gateway POST requests trigger Lambda to push feedback into SQS
- Containerized an EC2 Docker service with Docker to consume SQS messages and push feedback into DynamoDB
- Designed interactive dashboards in Amazon QuickSight to summarize ratings and comments for analytics
- Configured CloudWatch logging/metrics and IAM roles to secure Lambda-SQS-DynamoDB integration

Driver Fatigue System Feb 2025 – May 2025

- Built a live driver monitor analyzing biometric data with WiFi, GPIO, I2C, MPEG, HTTP, and REST protocols
- Configured OpenCV and dlib on a Raspberry Pi to analyze ear and mouth landmarks (EAR/MAR)
- Integrated an ESP32 to host a web server and stream JPEG video to a Flask server, headlessly hosted on the Pi
- Designed a real-time updating mobile and desktop UI front-end with analytics using Javascript and HTML
- Utilized KiCad to design and power-analyze a PCB with an OLED display, breathalyzer sensor, and buzzer.

AirBnB MongoDB Analytics Platform Feb 2025 – May 2025

- Developed a NoSQL platform on MongoDB Atlas using Python's PyMongo to ingest 500MB+ of Airbnb data
- Authored and deployed four advanced queries revealing booking and housing trends on normalized collections
- Investigated performance and design tradeoffs in indexing and sharding for MongoDB Atlas

Watchful Eye LA Sept 2023 – Dec 2023

- Classified real crime by their attributes with map interactivity from a self-designed 3NF relational database
- Compiled a Flask web app on a GCP-hosted MySQL database with a backend using SQLAlchemy and a VM
- Maintained the ETL pipeline using Python to clean, transform, and normalize LAPD crime data from Kaggle
- Maximized advanced SQL queries involving aggregation and nested joins with performance-tuned indexes