Gabrielle Boyer-Baker

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Dear United Airlines hiring team,

I've never been more eager to apply for an internship as I am right now. This opportunity is very personal to me because I have used United Airlines not only as a passenger but also as a means of advancing during my gap year overseas. I regularly booked and managed flights across continents using the United app during my time traveling abroad, including while I lived and worked in Tokyo. I was very impressed by the technology's dependability in addition to its ease of use. The accuracy of the people working in Technical Operations behind the scenes was evident in every seamless arrival and departure. I can't wait to help achieve that same level of perfection.

In the summer of 2026, I will be graduating DePaul University, where I am presently pursuing a Bachelor of Science in Computer Science with a minor in Neuroscience. I have a solid analytical basis thanks to my education in probability, algorithms, operating systems, and data analysis. Beyond the classroom, my internships have improved my capacity to function in fast-paced, structured settings where teamwork and prioritizing are crucial. I created automated reporting tools, extracted and normalized structured data, and created leadership update materials for NinjaTrader. I made sure that deadlines were fulfilled without sacrificing quality by consistently balancing several Jira stories and sprint deliverables.

My technological experience closely matches the credentials you are looking for. I am fluent with Excel, SQL-based database systems, Python, Java, and JavaScript. I also feel at ease creating analytics-driven applications to help with planning and forecasting. Using experiences that closely resemble maintenance forecasting and operational risk detection, I have created scheduling algorithms, carried out quantitative modeling, tracked workload capacity, and used statistical analysis to identify abnormalities. I am naturally curious and motivated to learn every layer of how aircraft operations function at scale.

Traveling internationally also taught me adaptability, cultural awareness, and composure in dynamic environments. Working in Tokyo required me to navigate language differences, different business norms, and unfamiliar systems quickly. That experience strengthened my communication skills and my ability to collaborate effectively across teams and leadership levels. I learned that operational excellence is built on alignment, precision, and clear communication, values that clearly define United’s team.

I bring enthusiasm, analytical rigor, and a genuine admiration for United’s mission of Connecting People, Uniting the World. Having experienced firsthand how your aircraft and operations connect lives across continents, I would be honored to contribute to the team that keeps that mission moving safely and efficiently.

Thank you for your time and consideration. I would welcome the opportunity to further discuss how my skills and passion can support United’s team.

Sincerely,
Gabrielle Boyer Baker

Gabrielle Boyer-Baker

Chicago, Illinois, +1(312) 989-8796

Email | LinkedIn | GitHub | Portfolio

## SUMMARY

I am an early career computer science major and neuroscience major at DePaul University who enjoys understanding how complex systems work and finding ways to make them run better. Through my coursework and internships, I have developed strong skills in data analysis, software development, and building tools that help teams plan more efficiently. I am comfortable working with numbers, spotting trends, and translating technical information into clear insights that support decision making. I value collaboration, clear communication, and staying organized when managing multiple projects at once. I am excited to bring my curiosity, analytical mindset, and strong work ethic to the workplace, where I can contribute, improve, learn, and help make meaningful change.

## EDUCATION

DePaul University | Chicago, IL | Sep. 2023 – June 2026
B.S in Computer Science, Minor in Neuroscience
Relevant courses: Data Structures I & II, Design and Analysis of Algorithms, Distributed Systems, Database Systems, Computer Systems I & II, Discrete Mathematics I & II, Data Analysis, Programming in Python

## TECHNICAL SKILLS

Programming: Python, Java, JavaScript, SQL, HTML, R, C
Tools: Excel, PowerPoint, Git, PostgreSQL, Redis, Kafka, Docker
EDX/Coursera: MITX, Columbia University Master Course, University of California San Diego, Stanford University, Imperial College of London
Relevant Courses: Big Data Analytics, Data Science, Computational thinking, Python, Robotics, Artificial Intelligence, Machine Learning with Big Data, Algorithms: Design & Analysis, MATLAB/octave, Linear regression

## PROFESSIONAL EXPERIENCE

NinjaTrader | Chicago, IL | Web Engineer Intern June 2025 – August 2025

- Collaborated with cross-functional agile teams to develop and maintain full-stack web features using JavaScript, React, and .NET, contributing to internal trading tools and dashboards
- Wrote unit-tested, production-ready code, resolved technical bugs in legacy systems, and participated in sprint planning, story grooming, and end-of-quarter deployment preparation
- Contributed to UI/UX refinement through responsive design and usability testing, documented engineering decisions for internal knowledge sharing, and engaged in continuous feedback and mentorship to strengthen technical performance

Dia Inc. | Tokyo, Japan | Software Engineer Intern Feb 2023 – April 2023

- Engineered Python-based solutions in a fast-paced environment, emphasizing accuracy, efficiency, and structured execution
- Presented technical analyses and strategic proposals to senior stakeholders, supporting data-driven decision-making
- Strengthened analytical and problem-solving skills through mentorship and complex technical assignments

Am4Teens | Los Angeles, California (remote) | Lead Computer Engineer Sep 2020 – Aug 2022

- Led development and deployment of a large-scale educational platform, coordinating a distributed technical team
- Managed planning sessions and aligned deliverables to ensure timely, high-quality project execution
- Secured executive approval for major platform improvements through strategic presentations and stakeholder engagement

## TECHNICAL PROJECTS

**Smart Task Scheduler | Forecasting and Workload Optimization**
*Java* | *Statistical Analysis* | *Scheduling Algorithms*

- Designed and implemented Priority, Earliest Deadline First, and Shortest Job First scheduling algorithms to simulate workload allocation and long-term operational planning across fluctuating demand cycles.
- Conducted quantitative simulations to evaluate capacity utilization, turnaround time, and deadline risk under varying workload intensities.
- Applied statistical deviation metrics to monitor resource distribution, flag demand imbalances, and support data-driven planning decisions.

**Task Orchestrator Platform | Planning Workflow Automation**
*Java* | *Spring Boot* | *PostgreSQL* | *Kafka* | *Docker*

- Built a distributed workflow management system to model structured operational planning environments and multi-stage execution processes.
- Developed database-backed lifecycle tracking tools to ensure data integrity and visibility across complex task pipelines.
- Implemented automated processing streams to enhance operational efficiency, improve throughput, and support scalable base-level planning analysis.

**Concurrent Job Queue | Capacity and Throughput Analysis**
*Java* | *Multithreading* | *Performance Metrics*

- Designed a thread-safe workload processing system to simulate multi-resource operational environments with constrained capacity.
- Performed throughput and capacity modeling to identify bottlenecks and improve resource allocation strategies.
- Generated structured performance and reliability metrics to support continuous process optimization and schedule integrity.

**Travel Currency Forecasting Tool | Predictive Modeling**
*Python* | *Time Series Modeling*
https://depaul-northern-trust-hackathon.vercel.app

- Built a time-series forecasting model to analyze historical data patterns and predict trend-based demand variability.
- Structured and normalized datasets to improve model reliability and forecast stability across shifting conditions.
- Evaluated risk variance and produced analytical reports to inform forward-looking planning decisions.

**Aircraft Maintenance Forecast Simulator | Maintenance Planning Analysis**
*Python* | *Scheduling Logic* | *Data Analysis*

- Developed a simulation model to forecast aircraft maintenance intervals, workload requirements, and fleet utilization patterns.
- Built scheduling logic to allocate maintenance tasks based on time windows, labor capacity, and operational constraints.
- Implemented risk-flagging mechanisms to identify overdue maintenance, capacity overload, and potential disruptions to maintenance windows.