

Arthur Zakrzewski

773-600-0150 | arttomzak@gmail.com | linkedin.com/in/arthur-zakrzewski | github.com/arttomzak

EDUCATION

Northwestern University

Expected June 2028

B.A. in Computer Science and Mathematics

Evanston, IL

- **GPA:** 3.83/4.0 | **Dean's List:** 3/3 | **SAT:** 1550
- **Relevant Coursework:** Data Structures and Algorithms, Fundamentals of Computer Programming (Racket, Python, C/C++), Multivariable Calculus, Linear Algebra, Design Thinking and Communication

EXPERIENCE

ElectronX

August 2025 – Present

Data Engineer Intern

Chicago, IL

- Built a DuckDB-backed Streamlit dashboard querying millions of price records to visualize market volatility trends
- Developed a scalable GeoPandas pipeline processing Shapefiles to map 2000+ counties to electricity market regions
- Automated SEC 10-K parsing with BeautifulSoup and Pandas, mapping 500+ electricity utilities to parent entities
- Engineered a fuzzy string matching utility to match companies' generation portfolio projects to 200+ legal entities

Student Holdings

June 2025 – Present

Software Engineer Intern

Evanston, IL

- Led technical development of internal student coupon startup preparing for a Fall 2025 launch with 50+ users
- Built a React Native MVP in Typescript with secure authentication and payment flow, enabling app monetization
- Architected a scalable Postgres database schema, streamlining coupon updates to reduce developer overhead
- Developed a FastAPI backend to process webhooks and manage user data, securely isolating admin functions

Aldridge Electric

June 2024 – September 2024

Project Management Intern

Des Plaines, IL

- Headed intern group in auditing 1000+ electrical drawings and daily reports, recovering \$200,000+ of revenue
- Compiled 7 construction invoices, structure foundation estimates, and dig site reports, facilitating project efficiency

Prospect Airport Services

June 2022 - August 2022

Passenger Service Assistant

Chicago, IL

- Cared for 100+ disabled flyers through the arrival and departure process at O'Hare's international terminal

PROJECTS

Counter-Strike Case Risk Engine | C++, CMake, Python, SteamWebAPI

- Building a multithreaded Monte Carlo simulation engine to estimate Counter-Strike case opening profitability
- Integrating Python scripts to retrieve live skin prices from third-party APIs and visualize expected returns
- Developing an object-oriented data ingestion pipeline using nlohmann JSON parsing to prepare simulation data

CTA Bus Tracker | C++, cURL, CTA Bus Tracker API

- Developed a program that parses OpenStreetMap data, identifying buildings and displaying nearby bus stops' data
- Optimized map parsing with binary search across 15000+ map nodes, reducing the search cost per node by 99%
- Integrated the CTA Bus Tracker API to deliver accurate, real-time bus arrival predictions to end users

The Recyclery Website | TypeScript, React, Supabase, Tailwind CSS

- Collaborated with 6 developers to design and develop an informational website for a local non-profit bicycle shop
- Leveraged Supabase to handle admin authentication and implement an API used to store and update image data
- Presented a design and technical spec to the client, and revised project trajectory based on biweekly meeting input

TECHNICAL SKILLS

Languages: C++, Python, C, TypeScript, SQL

Technologies: Pandas, FastAPI, React, React Native, Node, Expo, Tailwind CSS

Developer Tools: Git, CMake, Jupyter Notebook, SSH, Railway, Supabase, Figma