

Aiden Cullo

[✉ aidencullo@gmail.com](mailto:aidencullo@gmail.com) | [🔗 aidencullo](https://www.linkedin.com/in/aidencullo/) | [🌐 aidencullo.com](https://www.aidencullo.com) | ☎ 845-320-0566 | ⚙ New York, NY

EXPERIENCE

Life From Water — Lead Software Engineer	Sep 2025—
• Developed a UI to monitor live well sites across Egypt, giving administrators real-time site quality metrics.	
• Constructed a backend server to process registration of new water supply sites, facilitating expansion to more locales.	
• Orchestrated application deployment onto AWS EC2 machines using Terraform modules and Docker containers.	
JPMorgan Chase — Software Engineer II	Sep 2024—Mar 2025
• Built a dashboard capable of visualizing 1k+ LLMs , allowing data scientists to monitor ML workflows.	
• Augmented FastAPI logs with user IDs across all endpoints, ensuring traceability of 1M+ daily events.	
• Validated client identities accessing LLM artifact registry, enhancing security and guaranteeing government compliance.	
• Watermarked automated reports for non-compliant LLM projects to prevent unauthorized sharing to external parties.	
HeroGrow — Software Engineer I	Apr 2023—Sep 2024
• Developed a Ruby on Rails REST API to manage venue seating layouts, allowing real-time ticket reservations.	
• Integrated JavaScript Turbo Frames into the browser UI, allowing partial page updates, reducing load times by 50%.	
• Implemented OAuth2-based authentication, streamlining sign-in processes and increasing user registrations.	
• Integrated Square payments API into the customer checkout form, allowing customers to pay quickly and efficiently.	
Tradigro — Software Engineer I	Dec 2022—Apr 2023
• Indexed Vue.js journals, trades, and achievements views, allowing more granular and searchable public content.	
• Decoupled raw trade and statistical analysis modules, reducing duplicate feed publications upon user profile updates.	
• Standardized text encoding format in Vuex frontend data store, eliminating incorrect comment representations.	
• Refactored the data upload protocol, serializing I/O on trade files, preventing information loss from race conditions.	
SuperCerebros — Junior Software Engineer	May 2021—Dec 2022
• Built a progressive web application in React , deployed to 10k+ domestic and international users.	
• Integrated mobile and desktop applications via Ionic SDK and TypeScript , cutting total server requests in half.	
• Architected DBMS with Google Firebase , storing 1TB of user data while maintaining ms latency.	
SUNY Binghamton — Research Assistant	Aug 2018—Nov 2020
• Tuned evolutionary search algorithm for nanocrystal structures in C to obtain stabler ground states 90% of the time.	
• Achieved 50% speedup of the open source MAISE library via parallelization with OpenMP toolkit.	
• Automated neural network training with Bash scripts, reducing the iteration cycle from 100 to 20 hours.	
Caltech — Physics Fellow	Jun 2019—Aug 2019
• Performed scanning tunneling microscopy of topological defects in $(BiSb)_2Te_3$ -bi-layer topological insulator substrates.	
Sapienza University of Rome — Software Engineer Intern	Jun 2018—Aug 2018
• Built a multi-layer convolutional neural network in Python , classifying particle collisions with 99.5% accuracy.	
• Generated 20k training samples based on weakly interacting massive particle (WIMP) theoretical models.	

PROJECTS

pipenv — Contributor	Dec 2023—Feb 2024
• Migrated Click library to Rich and argparse tooling, reducing the package size by 1MB and cutting vendor dependencies.	

SKILLS

Programming Languages:	Python, JavaScript, TypeScript, C++, C, Java, Ruby, SQL, Go, Haskell, PHP, Rust, Swift
Web:	React, Vue.js, Angular, Node.js, Ruby on Rails, FastAPI, Flask, Django, Next.js, Express, Dart
Databases:	PostgreSQL, MySQL, SQLite, Firebase, Redis, Cassandra, Oracle, DynamoDB, MongoDB
Tools:	Git, Docker, Kubernetes, Jenkins, Apache, Nginx, AWS, Azure, GCP, Heroku, Netlify, Vercel
Spoken Languages:	English (<i>native</i>), Spanish (<i>fluent</i>), French (<i>proficient</i>), Portuguese (<i>basic</i>), Mandarin (<i>basic</i>)

EDUCATION

SUNY Binghamton	Class of 2020
• BS Computer Science, <i>Watson School of Engineering</i>	
• BS Mathematics, <i>Harpur College of Arts and Sciences</i>	
• BS Applied Physics, <i>Harpur College of Arts and Sciences</i>	