Ryan O'Connor

+1 (845) 825 4707
ry.p.ocon@gmail.com
ryan-oconnor-222b86246
ry-p-ocon

Summary

Resourceful and detail-oriented professional transitioning from a career in skilled trades to the technology sector. Combines hands-on experience in asset coordination, vendor management, and operational leadership with a strong foundation in computer science and software development. Proven ability to apply systems thinking and technical skills to support IT operations, full-stack development, and data-driven projects. Currently pursuing a B.A. in Computer Science with a focus on building scalable tools and managing real-world infrastructure. Seeking a role where technical aptitude and field-tested problem solving intersect.

Education

2022–2025 **Bachelor of Arts in Computer Science**, *Hunter College*, NYC, Aug. 2025 Completion

Disciplinary Focus: Data Structures and Algorithms, Machine Learning, Computer Architecture, Data Mining, Discrete Structures, Symbolic Logic

2015–2017 **Bachelor of Science in Labor Studies**, *Empire State College*, NYC, May 2017 Graduation

Disciplinary Focus: Project Management, Project Estimation, Economics of Construction. Labor Relations, Labor Management ()Labor and Employment Law

Skills

Programming	C++, Python, JavaScript, TypeScript, Bash, LaTeX
Web Stack	React, Firebase, BootstrapCSS, REST APIs
Tools	Git, GitHub, Jupyter Notebooks, VSCode, TeXStudio, Unraid, Anaconda
Design	GIMP, Icon Design, Poster Creation, Visual Branding
Platforms	Linux/Ubuntu, Windows
Operations	Ticketing Systems, Inventory Tracking, Vendor Coordination, SOP Documentation, Lifecycle Tracking, Field Equipment Handling
Soft Skills	Leadership, Communication, Critical Thinking, Persistence, Flexibility, Problem Solving, Team Collaboration

Technical Projects

React

Summer 2025 **AllCards – Web App**, *Team of 4*, Capstone

A full-stack web application for organizing and browsing physical trading card collections across franchises.

Technologies: React, TypeScript, Firebase (Authentication and Firestore), BootstrapCSS

- Built responsive UI with modular React components and dynamic routing
- Integrated Firebase Authentication for user registration, login, and session management
- Structured Firestore database to support nested user, franchise, and card collection data
- Queried external APIs (Pokémon, Magic, Yu-Gi-Oh!) to fetch and normalize card information
- Designed architecture to support future expansion of features and franchises

C++

Spring 2025 **SimOS: Process & Memory Manager**, *Individual Project*

An OS simulation through a simplified OS kernel.
It simulates process scheduling, memory allocation, and disk I/O handling.
Details:

- Designed and implemented a priority-based preemptive CPU scheduler with randomized tie-breaking for equal-priority processes
- Implemented worst-fit memory allocation strategy with recursive cleanup of zombie processes and their descendants
- Simulated FCFS (First-Come-First-Serve) disk I/O request queue with realistic process blocking and unblocking
- Managed process creation (fork), waiting, and cascading termination using a dynamic PCB table and child tracking
- Used basic containers only (e.g., vectors and arrays); no maps or advanced STL structures
- Core logic based on textbook chapters 1–10, prioritizing clarity and correctness over performance

Python

Fall 2024

NBA Awards Predictor – Data Mining, *Team of 5*

A machine learning pipeline that predicts NBA award winners using historical player and team statistics.
Technologies Python, pandas, scikit-learn, numpy, matplotlib, BRScraper

- Scraped and cleaned historical data from BasketballReference using BRScraper API
- Engineered features like win shares, usage rates, and adjusted scoring metrics
- Trained logistic regression, random forest, and ensemble models with cross-validation
- Visualized model performance and insights using matplotlib and seaborn
- Managed full data pipeline collaboratively with Git and Jupyter Notebooks

Unraid – Linux

Apr 2022–pres.

Home Media Server, *Individual Project*

A personal home media server operating on an Unraid Virtual Machine and Ubuntu Linux.

- Designed and implemented a home server using Unraid and Ubuntu Linux; selected hardware components and managed full lifecycle from procurement to retirement
- Created custom icons, posters, and media interface elements using GIMP to enhance the system's visual identity and user experience
- Performed system design, device testing, and OS installation (Windows/Linux) tailored to functional requirements
- Conducted ongoing inventory tracking and upgrades for multiple compute devices, ensuring long-term system integrity
  and storage optimization
- Implemented secure access protocols and planned future expansion for VPN and file/document lifecycle support

Relevant Experience

Journeyman

2015–2022

Electrician, *Local Union #3 IBEW*, NYC

Provided electrical and fiber-optic installations, maintenance, and repairs.

- Supervised warehouse and jobsite operations including hardware receiving, inventory tracking, and asset staging for deployment
- Managed jobsite requests through physical ticketing logs, asset request forms, and spreadsheet-based inventory tracking
- Coordinated with vendors and procurement teams to order, receive, and deploy job-critical IT hardware and materials
- Maintained detailed logs for audit compliance, asset delivery timelines, and return workflows across multiple locations
- Trained and led apprentices on SOPs involving equipment tracking, lifecycle usage, and safe storage procedures
- Interfaced with clients and stakeholders to report inventory status, resolve discrepancies, and ensure compliance with safety protocols

Certifications

- NYS DOL – Certificate of Completion for Apprenticeship Training
- OSHA 10
- OSHA 30
- Site Safety Training