

# NICHOLAS MANDAL

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## EXPERIENCE

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### Balyasny Asset Management

Software Engineer

Chicago, IL  
Mar 2020 - Present

- Developed Python service that identifies financing opportunities within equity and bond products across multiple regions; using linear optimization, it moves balances across prime brokers to take advantage of these opportunities, saving the firm hundreds of thousands of dollars a year.
- Built repo trading tool that enables traders to visualize their book and provides recommendations on how to optimally fund it using React, Flask, Pandas, and ag-grid.
- Created daily report for Portfolio Managers to manage financing details across their book; highlights borrow costs and tightening/loosening indicators with Python, Pandas, and Flask.
- Helped launch new-grad rotational program, intern mentor program, and firm blog.

### cmorq, Inc.

Software Contractor

Remote  
Mar 2021 - Jun 2021

- Developed internal tooling (Ethers/TypeScript) to securely interface with and execute transactions across on-chain protocols.
- Built structured logging using TypeScript created GCP BigQuery views to give CEO real-time insights into valuable business metrics (transaction volume, exchange volume, daily active users).

### Capital One

Software Engineer

Chicago, IL  
Aug 2019 - Mar 2020

- Built serverless ETL pipeline to allow users to interactively query structured and semi-structured data in S3 using AWS Glue crawlers to generate DDLs through schema changes and AWS Athena.
- Implemented several Lambda functions to lower compute costs by managing EC2 instances with boto3 as well as generated weekly cost analysis and usage reports for upper-level management.

### DataChat.ai

Software Engineer Intern

Madison, WI  
Aug 2018 - Dec 2018

- Built machine learning, data cleaning, and visualization functionality for Dr. Jignesh Patel's conversational data analytics startup using Python, pandas, NumPy, and scikit-learn.

### Capital One

Data Engineer Intern

McLean, VA  
Jun 2018 - Aug 2018

- Wrote end-to-end integration tests for suite of microservices using REST APIs and Python.

### UW-Madison Department of Computer Sciences

Teaching Assistant - Artificial Intelligence

Madison, WI  
Jan 2018 - Dec 2018

- Held weekly office hours and discussion sections for over 200 students enrolled in the upper division Artificial Intelligence course for two semesters under Dr. Chuck Dyer and Dr. Jerry Zhu.

### UW-Madison Division of Diversity, Equity & Educational Achievement

Academic Coach

Madison, WI  
Jun 2016 - May 2019

- Tutored students from underrepresented backgrounds with diverse learning needs in introductory computer science and economics courses. Students had an average course GPA of 3.75.

## SKILLS

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Languages: Python, JavaScript/TypeScript, SQL, HTML, CSS, Rust, Solidity  
Platforms/Libraries: Flask, React/Next.js, Django, Node.js, Docker, Tailwind CSS

## EDUCATION

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### University of Wisconsin-Madison

B.S. Computer Science, Statistics - Dean's List

Madison, WI  
Sep 2016 - May 2019

## PROJECTS

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### On Deck Founders Fellowship ODF11

<https://beondeck.com>

Joined On Deck to launch my own startup, but ended up contracting and advising other OnDeck startups including Roots (<https://roots.homes>), Aura (<https://aurafinance.io>), and Tripsha (<https://tripsha.com>).

### Blynd React, Django, PostgreSQL, PWA

<https://eatblynd.com>

Developed food ordering platform that takes the decision fatigue out of deciding what to order.