

Joe Wlos

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PROFESSIONAL EXPERIENCE

Cello Capital Management: *Consultant*

December 2019 – Present

- Refactored Python scripts and SQL stored procedures to achieve an 80% reduction in the loading time for fixed income portfolio risk analytics in Power BI
- Improved logic for estimating prepayment penalty cashflows for Ginnie Mae mortgage-backed securities

Dwight Securities Management: *Associate*

June 2017 – October 2019

- Fixed income hedge fund with investments in agency CMBS and multifamily bridge loans
- Built property valuation and cashflow models in Python and VBA to price bonds and assess risk
- Created dashboards for visualizing and searching multifamily and nursing facility datasets to identify properties with a high likelihood of mortgage prepayment
- Used the Python microframework Flask to build a web portal for reviewing underwriting documents

JOOR: *Data Analyst*

June 2016 – May 2017

- Developed histogram of oriented gradients feature descriptors to detect clothing categories in images
- Produced visualizations of dominant seasonal colors using k-means clustering of pixels in product photos

Morningstar: *Data Analyst, Reference Data*

July 2015 – May 2016

- Developed Python scripts to map identifiers to derivatives using Bloomberg's Open FIGI API
- Automated the retrieval and visualization of sector data for the weekly equity research newsletter

VOLUNTEER EXPERIENCE

Watchlist on Children and Armed Conflict: *Delta.NYC Volunteer*

November 2016

- Civic Hall Labs' *pro bono* program to operate and develop tech solutions for public policy organizations

Presevent: *Co-Founder*

May 2015 – June 2016

- Scraped location, time, and cost data for over 3,000 campaign events for an Election 2016 iOS app
- Accepted into Facebook's 2015 FbStart program, which included mentorship and \$50,000 in benefits

EDUCATION

Grinnell College: *B.A. in Political Science with Honors*

Class of 2015

- Thesis applying historical development of *habeas corpus* to extrajudicial detentions at Guantánamo Bay
- Winner of 2015 Baumann Essay Prize for research examining the effective regulation of net neutrality
- 2012-2013 chair of the Student Publication and Radio Committee, managing a \$200,000 annual budget

SKILLS

Databases

- Amazon DynamoDB
- PostgreSQL
- SQLAlchemy

Data Analysis

- Pandas & NumPy
- Tensorflow
- VBA

Data Visualization

- D3.js
- Dash by Plotly
- Power BI

Web Development

- Flask & Django
- JavaScript
- PHP