Connor Duncan

connor@connorduncan.xyz

Eager, motivated, and analytical mathematician with experience in software development, optimization, and data science. I enjoy automating tedious tasks, and raising the skill floor for front-office software projects.

EDUCATION

2022–2023	**UNIVERSITY OF ILLINOIS AT CHICAGO**
	M.Sc. in Applied Mathematics || 3.86/4.0 GPA
2017–2021	**UNIVERSITY OF CALIFORNIA, BERKELEY**
	B.A. in Physics; B.A. in Applied Mathematics || 3.366/4.0 GPA

EXPERIENCE

2023 –	**INVESCO**
	Quantitative Analyst (Fixed Income ETF Portfolio Management)
	◇ Developed on-desk dashboard in Python (Dash/Snowflake/Polars) used for daily portfolio management tasks, including pricing/accounting/holding/risk/index reconciliation, flow optimization, and communication of baskets with third parties.
	◇ Planned and implemented improvements to CI and code quality: brought DDL under version control, added static type analysis and testing to critical code, implemented Jinja templating of SQL queries.
	◇ Managed ongoing transition of front-office systems from Aladdin to Charles River, requiring complete re-sourcing of all data pulled from Aladdin.
	◇ Migrated dataframe libraries from Pandas to Polars (this was an excellent decision).
2022 – 2023	**UNIVERSITY OF ILLINOIS AT CHICAGO**
	Teaching Assistant (Algebra & Business Linear Algebra)
SUMMER 2020	**NATIONAL RENEWABLE ENERGY LABORATORY**
	SULI Intern
	◇ Developed React app visualizing projected impact of environmental policy changes in the LA area
2018–2020	**UNIVERSITY OF CALIFORNIA, BERKELEY; SLAC**
	Research Assistant, Pyle Group
	◇ Assisted with installation of Helium Dilution Refrigerator
	◇ Assisted with Linux server administration (RIP CentOS) and DAQ Dashboard development.

TECHNICAL SKILLS

PYTHON	◇ Polars, SciPy, Flask, Dash, Jinja, threading/multiprocessing, Pydantic, cython.
LINUX	◇ Self-hosted websites using both apache and nginx, as well as a mail server.
	◇ Daily Arch Linux user since 2018, more comfortable in tmux than Windows.
OTHER TECH	◇ In descending order of expertise: (n)vim, SQL, git, LaTeX, JavaScript, Aladdin, MATLAB, Rust, Bloomberg, Axioma, C/C++, Redis, R, Excel.

/ETC

SPANISH	◇ Conversational speaker.
INTERESTS	◇ AT WORK: Mixed Integer Programming, Linux, Data Science, CI Improvements (that don't annoy fast-moving quant teams).
	◇ AFTER WORK: Piano, Traveling, Strategy Games (e.g. Stellaris).