

Jiayin (Joy) Liu

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EDUCATION

Duke University

Bachelor of Science in Computer Science, Minor in Visual & Media Studies

Durham, NC

Aug 2021 – May 2025

- **GPA:** 3.9/4.0
- **Relevant Coursework:** Database Systems, Practical Financial Market, Algorithms in the Real World, Data Structures and Algorithms, Computer Systems, User Research Methods

Loomis Chaffee School

High School Diploma

Windsor, CT

Sep 2017 – May 2021

- **Award:** Cum Laude Graduate, High Honor Roll, Sanford B.D. Low Art Prize

PROFESSIONAL EXPERIENCE

GBCS Group

Financial/Risk Analyst Intern

Calgary, AB

Aug 2023 – Present

- Prepare proposals and financial analyses including forecasts, budgets, cost models for management reporting
- Provide decision support and analyze key business performance related to fleet operations

Asset Pro

Quantitative Research Intern

Shanghai, China

Jun 2023 – Aug 2023

- Adapted U.S. market focused quantitative factor investing strategies to the Shanghai composite market in Python
- Backtested high-frequency multi-factor stock selection models with historical tick data, visualization and extensive analysis of portfolio performance metrics
- Actively participated in weekly team feedback and progress meetings, providing updates and presenting findings

Sorbara Schumacher McCann LLP

Web Designer

Waterloo, ON

May 2021 – Aug 2021

- Created industry-specific advertisement graphics using Photoshop, Illustrator, and Canva
- Redesigned the company website using HTML, CSS, and JavaScript

PROJECT EXPERIENCE

Kenan Institute for Ethics, Environmental Justice Lab

Quantitative Research Assistant

Durham, NC

Sep 2023 – Present

- Collaborate on data-driven sustainability focused research projects using social science and computational research methods
- Conduct data cleaning, visualization, and updates on large geospatial datasets using R

Virtual Black Charlotte

Lead Researcher

Durham, NC

Jan 2022 – Sep 2023

- Performed geo-referencing and feature tracing of architecture maps for historic African American neighborhoods in Charlotte using ArcGIS Pro
- Developed an open-sourced public-facing storytelling website that incorporated multi-layered interactive map viewers using HTML, JavaScript, and CSS

Incorporating Pre-Game Ranking – Mathematic Sports Analysis

Independent Researcher

Remote

Jun 2020 – Oct 2020

- Enhanced the accuracy of NFL regular season outcome predictions by developing advanced mathematical methods using Python (utilizing Scikit-Learn and pandas libraries)
- Showcased research findings at the 2020 Midwest Sports Analytic Meeting held at Central College

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Ways & Means Podcast

Illustrator

Durham, NC

May 2022 – Present

- Design and illustrate captivating cover images and episode cover images for the Duke Sanford School of Public Policy podcast, using visually appealing and engaging visuals to highlight social and political problems and solutions
- Create compelling digital content for the Sanford School's social media platforms, effectively promoting key initiatives and events to a wide audience

Alpha Kappa Delta Phi

Vice President Internal, Graphic Design & Fundraising Chair

Durham, NC

Jan 2022 – Present

- Manage chapter operations to ensure smooth internal functioning and clear external communication between the Duke university chapter and the international leadership board
- Plan and organize various fundraising events to highlight sorority focus in Asian Awareness and philanthropy in Breast Cancer Awareness through postcard and bake sales

SKILLS & INTERESTS

Computer Science: Python (pandas, Scikit-Learn, Matplotlib), SQL, R, Java, C, C#, JavaScript, HTML, Git, Unity, Unreal Engine

Modeling & Graphic Design: Blender, Maya, Fusion 360, Substance Painter, Photoshop, Illustrator, InDesign

Other Skills: MS Office, ArcGIS Pro, QGIS, ArcGIS Storymap

Interests: Golf, Drawing, Painting, Printmaking