malkov@math.ucla.edu

## **EDUCATION**

University of California, Los Angeles | Los Angeles, CA August 2022 – Present Mathematics, Ph.D. University of North Carolina at Chapel Hill | Chapel Hill, NC *May 2020 – May 2022* Mathematics, B.S. Honors, Highest Distinction | GPA: 3.95 | Honors Carolina | Carolina Research Scholar | Seely College Fellow

#### WORK EXPERIENCE

#### **UCLA** | Los Angeles, CA

Graduate Teaching Assistant: Analysis, Linear Algebra, Diff. Equations August 2022 – Present

- Prepare and teach weekly discussion sections for undergraduate classes of 35+ students
- Hold weekly office hours and clarify challenging mathematical concepts to struggling students
- Grade weekly homework assignments, midterms, and final exams in a timely manner

#### **Scholar Launch** | Los Angeles, CA

Faculty Advisor

- *April 2023 October 2023* Provided one-on-one mentoring for two gifted high school students on academic projects in partial differential equations (PDE) and natural language processing (NLP)
- Advised students on research methodology and supervised the scientific writing process

#### HelioCampus | Chapel Hill, NC

Senior Research Analyst

- Developed and launch a benchmarking analysis of higher-ed institutional retention and churn rates
- Managed an unofficial direct report and oversaw their involvement in a data analytics project
- Co-coordinated the company transition of benchmarking visuals from PowerPoint to Tableau

**Research Analyst** 

- Conducted financial data extraction, analytics, and visualization for higher education institutions with over \$130 billion in total client revenue
- Developed and implement data-driven methodologies measuring institutional efficiency
- Communicated central insights to 120+ C-level executives and university senior leaders

### Lenovo | Morrisville, NC

Data Services Analyst Intern

- Designed and presented informative, concise visualizations of key customer response trends
- Analyzed global customer satisfaction data and proposed relevant changes to business action plans
- Integrated the Azure sentiment analytics API into an Excel-based keyword search system

# **RESEARCH EXPERIENCE**

### Physical Mathematics Laboratory | Chapel Hill, NC

Undergraduate Researcher

- Discovered the first classical analogue to the quantum phenomenon of Anderson localization
- Developed experimental and numerical models of a hydrodynamic pilot wave system
- Co-wrote and submitted a manuscript for publication (currently under review)

### Undergraduate Honors Thesis | Chapel Hill, NC

Honors Thesis Advisor: Dr. Jeremy Marzuola

Established decay properties of a system of differential equations using spectral theory techniques

# Credit Suisse | Durham, NC

Financial Modeling Hackathon

- Constructed neural networks in Keras/TensorFlow to evaluate the robustness of option call models
- Competed against two teams to present and advocate for the model to business executives

# *May 2021 – September 2021*

December 2020 – May 2021

# June 2019 – August 2019

August 2020 – Present

*September 2021 – May 2022* 

February 2020