Julian Asilis

☎ (305) 934 6867 ⊠ asilisjulian@gmail.com 🗓 julianasilis.com U.S. citizen

Education

2016 – 2020 A.B. in Mathematics with High Honors, HARVARD UNIVERSITY, Cambridge, MA.

Senior Thesis

Probability Monads, written under Dr. Michael Hopkins. Earned High Honors after written and oral thesis examination.

Selected Coursework

Mathematics: Honors Linear Algebra and Real Analysis I & II, Complex Analysis, Abstract Algebra I & II, Category Theory, Graduate Algebraic Topology, Graduate Commutative Algebra. Computer Science: Artificial Intelligence, Data Structures and Algorithms, Graduate Machine Learning.

Research

July 2021 On the Computable Learning of Continuous Features, Eighteenth International Conference on Computability and Complexity in Analysis (CCA).

> Nathanael Ackerman, Julian Asilis, Jieqi Di, Cameron Freer, and Jean-Baptiste Tristan. Extended abstract and slides.

Teaching

Holding section for the following course at Boston College:

• CSCI 3340.01: Introduction to Machine Learning with Applications to Chemistry (Fall 2021)

Graded problem sets and held office hours for the following courses at Harvard:

- Math 101: Sets, Groups, and Topology (Spring 2020)
- Math 112: Real Analysis I (Spring 2019)
- Math 122: Abstract Algebra I (Fall 2018)

Experience

June 2021 - Research Associate, Boston College, Chestnut Hill, MA.

Present • Performing research under Dr. Jean-Baptiste Tristan in computable machine learning theory, group-invariant representation problems in deep learning, and Gaussian processes applied to quantum chemistry.

July 2020 - Quantitative Research Analyst, AQR CAPITAL MANAGEMENT, Greenwich, CT.

- May 2021 Refined and expanded several factors used to trade dozens of assets in fixed income.
 - Delivered several 60-minute presentations to senior researchers and partners.
 - Performed inference and time series modeling on data sets of 1M+ observations using Python (pandas package).
 - Wrote production code in Python and SQL.

Summer 2019 Research Summer Analyst, AQR CAPITAL MANAGEMENT, Greenwich, CT.

- Completed 10-week research project studying macroeconomic signals for the fixed income group, including extensive signal testing in Python.
- Delivered findings to partners at the conclusion of the internship through a 60-minute presentation.

Summer 2018 Guided Study, UNIVERSITY OF MIAMI, Miami, FL.

• Studied representation theory under Dr. Dvorsky of the University of Miami, covering 20 chapters of *Representations and Characters of Groups*.

Community

2019 - 2020 Math Mentor, Harvard Gender Inclusivity in Mathematics (GIIM), Cambridge, MA.

2018 – 2019 Teaching Assistant, Cambridge Math Circle, Cambridge, MA.

Skills

Python (primary), SQL, OCaml, LATEX; Spanish.