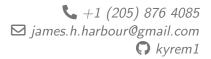
# James Harbour

# Resume



#### "Find what you love and let it kill you" — Charles Bukowski

I am a second year mathematics and computer science double major at the University of Virginia with a comprehensive undergraduate and graduate-level mathematics background. My primary interests are in operator algerbas and noncommutative geometry.

Following my PhD, I plan to pivot towards the financial sector with a focus on quantitative finance and algorithmic trading.

### Mathematics Experience

- pre UVA Through concurrent dual enrollment at the University of South Florida during high school, I completed the majority of courses in a mathematics major as well as a variety of graduate-level courses.
- UVA 1st Year Took the same mathematics courseload as UVA's 1st year mathematics PhD students (and more). Passed the analysis (real & complex) PhD qualifying exams.
- OUVA 2nd Year Spent the summer at UVA doing a one-on-one reading course with one of my professors. Living expenses were covered by a \$2000 grant from the mathematics department. Currently, I am taking three 2nd year PhD-level mathematics courses. I am also a member of the UVA operator theory seminar for graduate students

### Financial Experience

 $\circ$  Member of UVA's Alternative Investment Fund  $\,$  An investment club managing a portfolio of \$50,000 AUM. Rigorous selection process with multiple interviews and a 3% acceptance rate. This club includes an extensive training program for new members.

# Programming Experience

Proficient In Java, C++, Python, Javascript (see my github above)
Using scientific-computing software (SageMath, Mathematica) level: medium
Using document markup software (ETEX, Office Suite) level: advanced
Using Linux level: medium. (I currently run Arch-Linux on my main laptop)

#### Honors and Awards

- Various Grants/Funding
  - \$2000 Supporting summer research in operator algebras alongside Dr. Benjamin Hayes.
  - \$500 For travel to the Notre Dame workshop in Elliptic Curves and Modular Forms
  - \$1000 Supporting travel fees to attend the East Coast Operator Algebras Seminar.
- Mathematics PhD Qualifying Exams
  - I successfully passed the Real and Complex analysis PhD qualifying exams as a freshman.
- College Science Scholar, University of Virginia
  - Selected as one of 18 undergraduates for a research-oriented science-mentoring program.