

# David Eyal

646-919-2480 | de2425@columbia.edu | 70-28 Kessel Street

## EDUCATION

### Columbia University

New York, New York

Bachelor of Arts in Computer Science, Statistics

Expected 2026

- **GPA:** 3.78; **Major GPA:** 3.93 **Honors:** Dean's List
- **Relevant Coursework:** Data Structures, Discrete Mathematics, Artificial Intelligence, Advanced Programming, Probability Theory, Multivariable Calculus, Linear Algebra, Statistical Inference, Stochastic Methods, Cloud Computing

## WORK & LEADERSHIP EXPERIENCE

### DitecT Lab, Columbia University

New York, New York

Summer Research Assistant

May 2024 - PRESENT

- Awarded NSF Sponsorship for Undergraduate Research in Civil, Mechanical and Manufacturing Innovation (CMMI)
- Designed and implemented self-driving algorithms using Amazon's DeepRacer Vehicles, improving autonomous navigation capabilities
- Integrated ROS2 and eProsima DDS to utilize DeepRacers as Connected Autonomous Vehicles (CAVs), enabling real-time communication between vehicles
- Implemented software in Python to build autonomous driving algorithms and constructed a high-performance simulator, facilitating data collection and performance testing

### Dept. of Computer Science, Columbia University

New York, New York

Backend Developer/Researcher

January 2024 - May 2024

- Spearheaded backend development for a ML-powered web application centering on data clustering methods for neuroscience research, under Prof. Nakul Verma.

### Self-Employed

New York, New York

Professional Poker

May 2023 - August 2023

- Generated over \$50,000 in online and live profits, analyzing and managing extensive databases of gameplay data to optimize strategies.
- Utilized Game Theory Optimal (GTO) Solvers to study poker, including running simulations of toy games to improve knowledge and application of game theory skills.
- Played over 1 million hands while managing 8-10 tables simultaneously, which required rapid decision-making and risk assessment, enhancing multitasking skills and strategic thinking

## Projects, Skills, Activities

**Technical Skills:** Python (NumPy, SciPy, Pandas, Jupyter, scikit, etc.), R, Java, C, C++, Latex, React, JS, Flask

**NYT Spelling Bee Solver** - <https://github.com/de2425c/SpellingBeeSolver>

- Designed a spelling bee solver utilizing HashMaps in Java for optimal lookup times, adapting a combinatorial algorithm to solve all combinations of 2-11 letter words in under 1s

**Should I Call Poker Calculator** - <https://github.com/de2425c/ShouldICall-PokerCalc>

- Able to calculate the profitability of calling a certain poker hand against a range of possible hands
- Java Hashmap used to randomly pull key-value pairings of cards to run simulations
- Capable of running over 10,000 simulations in under 10s with <1% error compared to industry standard calculators

**Susquehanna International Group Trading Discovery Day - April 2024**

- Learned from various quantitative traders at SIG about the industry and trading techniques
- Participated in mock trading demos and trading games to learn about the decision making skills of traders

**Columbia University Poker Club Co-President - September 2024**

- Organized the Second Annual Columbia Poker Tournament with 400+ participants, enhancing club visibility and member engagement