

# Adithya Solai

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## EDUCATION

**University of Maryland – College Park, MD**  
Bachelor of Science, Computer Science

**Expected Grad: Spring 2022**  
**Cumulative GPA: 3.938 / 4.0**

## TECHNICAL SKILLS

**Languages:** Python, Java, SQL, HTML/CSS, R

## PROFESSIONAL EXPERIENCE

### Amazon

Software Development Engineer Intern

**Seattle, WA**  
June 2021 – August 2021

### Ocient

Software Engineer Intern

**Chicago, IL**  
January 2021 – April 2021

### 605 (Data Analytics Firm for TV Ad Measurement)

Junior Data Analyst

**New York, NY**  
May 2020 – August 2020

- Utilized Databricks' PySpark/SparkSQL to optimize SQL queries that operate on a data pipeline of 5+ vendors and billions of rows of data on a daily basis to reduce Spark cluster costs and save future development time.
- Built Tableau dashboards to deliver daily reports with 50+ metrics that visualize the flow and accuracy of data.

Data Solutions Intern

June 2019 – August 2019

- Regression Analysis Engine:** Developed a script that accurately compares 605's live algorithms with those in development by randomizing and parameterizing 20+ possible user fields to generate 10+ million input combinations.

## TEACHING EXPERIENCE

### University of Maryland

Teaching Assistant (BUDT 758B: Big Data & Artificial Intelligence for Business)

**College Park, MD**  
August 2020 – Present

- Guiding 120 M.S. in Information Science students on Deep Learning concepts and PyTorch coding assignments.

### Self-Employed

Private Chess Tutor

**Princeton, NJ**  
August 2016 – August 2019

- Coached 50+ children to become US Chess Federation-ranked players and medalists at dozens of tournaments.
- Taught 100+ lessons to hundreds of students at various chess academies (Hub for Learning) and volunteer groups.

### UMD International Economics and Finance Society (IEFS) – VP of Content

December 2019 – Present

- Creating an educational, data science-oriented branch of IEFS to help members break into quantitative finance roles.
- Lead a committee of 4 researchers in developing and presenting professional slide decks and case studies to 70+ club members on topics such as value investing, cryptocurrencies/blockchain, and the macroeconomics of political policy.
- Spearheading IEFS Digest as Chief Editor & Writer to publish articles on topics like market technical analysis, oil futures, recession indicators, etc. ([medium.com/umd-iefs-online-content](https://medium.com/umd-iefs-online-content)) (10 articles already published.)

### Medium – Towards Data Science

Writer

**Remote**  
July 2020 – Present

- Publishing educational data science articles in the premier publication (440k+ followers) for data science discourse.
- Wrote a blog series (100+ likes) on Reinforcement Learning for AI newcomers. ([adithyasolai.medium.com](https://adithyasolai.medium.com))

### Plainsboro Public Library Junior Chess Club

President & Volunteer

**Plainsboro, NJ**  
February 2016 – March 2018

- Developed and taught chess lessons for 40+ beginners, novice, and advanced students every week.

### Plainsboro Public Library Junior Math Club

Founder, President, & Volunteer

**Plainsboro, NJ**  
January 2017 – August 2017

- Constructed math lessons and worksheets for 20+ students in grades 4-6 to explore advanced mathematics.

## PERSONAL PROJECTS

### Monte Carlo Blackjack – Python (Pandas/NumPy/OpenAI Gym/Matplotlib)

- Designed a policy-based, stochastic Reinforcement Learning (RL) algorithm that uses the First-Visit Monte Carlo Method and a Blackjack environment built from scratch in OpenAI Gym to maximize Blackjack returns.
- Reduced casino edge from 20% to 4% by training an AI agent with my RL algorithm through 1 million epochs.

### Song Lyrics Analysis Script – Java

- Analyzed 8 lyricism metrics in thousands of lyrics to investigate the lyrical creativity of 3 hip-hop artists.

### NBA Analytics – Python (Pandas/BeautifulSoup)

- Scraped season stats for 400+ NBA players using BeautifulSoup. Used Pandas to clean 30+ rows and explore data.

**AWARDS/HONORS:** ACT: 35 / 36, SAT: 1500 / 1600, UMD CMNS Dean's List x 3