

Adithya Solai

adithyasolai7@gmail.com | 609-651-6459 | [linkedin.com/in/adithya-solai](https://www.linkedin.com/in/adithya-solai) | github.com/adithyasolai | adithyasolai.com

EDUCATION

University of Maryland – College Park, MD
Bachelor of Science, Computer Science (Minor: Business Analytics)

Expected Grad: Spring 2022
Cumulative GPA: 3.938 / 4.0

TECHNICAL SKILLS

Languages: Python, Java, SQL, R, HTML/CSS, C++

PROFESSIONAL EXPERIENCE

Amazon | *Software Development Engineer Intern* – Seattle, WA

Jun. 2021 – Aug. 2021

Ocient | *Software Engineer Intern* – Chicago, IL

Jan. 2021 – Apr. 2021

- Developed a Page Quarantining cluster tool in a Raft consensus framework that reduced debugging time by hours for 10+ Stream Loader Engineers by allowing them to “quarantine” bad data chunks on a faulty dev or production cluster.

605 (Data Analytics Firm for TV Ads) | *Junior Data Analyst* – New York, NY

May 2020 – Aug. 2020

- Utilized Databricks’ PySpark/SparkSQL to optimize SQL queries operating on a daily data pipeline of 5+ vendors and billions of records 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.

605 (Data Analytics Firm for TV Ads) | *Data Solutions Intern* – Syosset, NY

Jun. 2019 – Aug. 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

Univ. of Maryland | *Teaching Assistant (BUDT 758B: Big Data & AI for Business)*

Aug. 2020 – Dec. 2020

- Held weekly office hours and answered 75+ email questions to assist 30+ students with 5 PyTorch assignments.

Self-Employed | *Private Chess Tutor* – Princeton, NJ

Aug. 2016 – Aug. 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.

International Economics and Finance Society (IEFS) | *VP of Content* – Univ. of MD

Dec. 2019 – Dec. 2020

- Organized and taught educational, data science-oriented workshops to help members break into quantitative finance roles and attract new members from technical backgrounds to diversify the #1 rated club at the Smith School of Business.
- Led 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, investment banking, and SaaS business models.
- Spearheaded 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) (13 articles published.)

Medium (Towards Data Science) | *Writer* – Remote

Jul. 2020 – Nov. 2020

- Publishing educational data science articles in the premier publication for data science discourse (440k+ followers).
- Wrote a blog series (900+ reads) on Reinforcement Learning for AI newcomers. (adithyasolai.medium.com)

Plainsboro Public Library Junior Chess Club | *President/Volunteer* – Plainsboro, NJ

Feb. 2016 – Mar. 2018

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

Plainsboro Public Library Junior Math Club | *President/Founder/Volunteer* – Plainsboro, NJ

Jan. 2017 – Aug. 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 custom Blackjack environment built 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.

NBA Three Point Revolution – Python (Pandas/scikit/seaborn/BeautifulSoup)

- Conducted Linear Regression to analyze significance of 3-pt efficiency in predicting team win % across 4 eras.
- Scraped 3000+ player season average records and team standings data dynamically using BeautifulSoup.

Song Lyrics Analysis Script – Java

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

Linear Algebra Engine – Java

- Implemented Matrix and Vector objects with functions like inverse, determinant, and row-reduced echelon form.

AWARDS/HONORS: ACT: 35 / 36, SAT: 1500 / 1600, Univ. of Maryland CMNS Dean’s List x 4