

Justin Chen

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Availability: July – December 2022

EDUCATION

Northeastern University, Khoury College of Computer Sciences

Candidate for Bachelor of Science in Data Science and Business Administration

Awards and Honors: Dean's Scholarship, Dean's List, University Honors Program

September 2019 - Present

Expected: December 2023

GPA: 3.48/4.0

Relevant Coursework: Object Oriented Design; Discrete Structures; Financial Data Analytics with Python; Data Science Foundations; Fundamentals of Computer Science 1 and 2; Sports, Media, and Communication

Current Coursework (Spring 2022): Organizational Behavior, Machine Learning and Data Mining 1, Information Presentation and Visualization, Database Design

Activities: Baseball Student Manager, WRBB Sports, The Red and Black, Intramural Sports

SKILLS AND INTERESTS

Programming Languages and Frameworks:

- Proficient: Java, Python, Racket
- Familiar: Django, SQL, HTML, CSS, Javascript, React, R

Software: Git, IntelliJ/PyCharm, Jupyter Lab, Visual Studio Code, AWS

Interests: Sports Memorabilia, Movie Soundtracks, Web Development, Sports Technology

Other: Social Media, Sports Writing and Broadcasting, Chinese (native speaker)

PROJECTS

Predicting Batted Ball In-Play Average (BABIP) with Statcast (Python/Jupyter Notebook)

- Presented the correlation between BABIP, traditional counting stats, and batted-ball metrics
- Used K-NN and Random Forest to predict batted-ball results based on exit velocities and launch angles
- Scraped Baseball Savant data with Selenium and BeautifulSoup; wrangled and stored data with Pandas and CSVs
- Created graphs with Plotly to visualize the relationships between batted-ball metrics and results

Image Editor and Animator (Java)

- Fully functional image processor that adds filters, colors, and size changes to shapes
- Animates shape transformations with Java Swing
- Used the Factory and Model-view-controller design patterns

WORK EXPERIENCE

Student Manager and Analyst

Northeastern University Baseball

Boston, MA

January 2020- Present

- Collected batted ball and pitching metrics with Rapsodo and HitTrax
- Charted stats during intrasquad games, including pitching charts and offensive execution
- Utilized Synergy and Trackman data to create scouting reports and pitch design
- Assisted coaches and athletics staff with practice and gameday operations

Baseball Systems Development Co-op

Baltimore Orioles

Baltimore, MD

July 2021- January 2021

- Rebuilt data pipelines for player stat views on the team's internal site with Django
- Developed amateur player evaluation forms and tables for scouts with React
- Made quality checks and internal ID mapping for imported third-party data
- Created Slack bots for bad data quality notifications
- Automated web scrapers with AWS lambda functions

Course Assistant

Khoury College of Computer Sciences

Boston, MA

September 2020- June 2021

- Tutor for Fundamentals of Computer Science 1
- Graded and gave feedback on students' weekly assignments
- Led office hours and lab breakout rooms to discuss and practice course concepts