

Harry Shomer

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<https://github.com/HarryShomer>

Education

Brooklyn College (CUNY), Brooklyn, NY

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Major: Bachelor of Science in Computer Science

GPA: 3.81

Relevant Courses: Artificial Intelligence, Database Systems

Skills

Languages: C++, Java, Python, SQL, HTML

Frameworks/Libraries/Tools: Pandas, Scikit-Learn, Django, JQuery

Projects

NHL Expected Goals Model:

Link: <https://github.com/HarryShomer/xG-Model>

Technologies Used: Python, Pandas, Numpy, Scikit-Learn, and SQL

- Utilized machine learning techniques to create a model that predicts the probability of an unblocked shot of being a goal in the National Hockey League.
- Three different machine-learning classifiers were used to fit the same data and features, including: Logistic regression, Random Forest, and Gradient Boosting.
- All three models were evaluated using both log loss and by plotting its ROC curve and calculating its AUC score.
- The Gradient Boosting model performed best in both evaluation metrics followed by the Random Forest model and then the Logistic regression model.

OffsidesReview.com:

Link: <https://github.com/HarryShomer/OffsideReview>

Technologies Used: Python, Django, SQL, JQuery, HTML, and CSS

- OffsideReview is a website for modern National Hockey League statistics from the 2016-2017 season onwards for all Regular Season and Playoff games.
- Can query statistics for skaters, goalies, and teams with a variety of different filters (e.g. date, player, team).
- Each query makes an Ajax request to the server to retrieve the requested data.
- At 10 a.m. every morning the new games are scraped and then processed with the new data being added to the database.

Hockey Scraper:

Link: <https://github.com/HarryShomer/Hockey-Scraper>

Technologies Used: Python

- Designed to allow one to scrape the Play-By-Play and Time-On-Ice tables off of the National Hockey League (NHL) API and website.
- Can scrape the information for any preseason, regular season, and playoff game from the 2007-2008 season onwards.
- Has functionality to scrape games by season, between a given date range, and by individual games.
- Available as a python package on pip as "hockey_scraper".