Jacob (Kuba) Wolf

Newton, Massachusetts • jacobwolf2022@u.northwestern.edu • 617-945-6959

Education

Northwestern University, Evanston, Illinois

Anticipated Graduation June 2022

Bachelor of Science in Computer Science • GPA: 3.87/4.00

Relevant Coursework: Intro. to Artificial Intelligence, Intro. to Computer Systems, Data Structures & Algorithms, Probability & Stochastic Processes, Intro. to Computer Engineering

Boston College, Chestnut Hill, MA

2018-2019

Computer Science and Economics • Major(s) GPA: 4.0

Skills

Programming Languages/Competencies:

Proficient in: C++, Python, Java, C, Racket. Familiar with: Assembly, OpenCV, LaTeX, GitHub

Projects

Northwestern Robotics Lacrosse Goalie

September 2019 - Present

- Implemented multi-object tracking software with C++ and OpenCV to track lacrosse balls for a lacrosse goalie robot designed to be used by the Northwestern women's lacrosse team.
- Strategized and determined optimal program structure for enabling goalie robot to simultaneously process footage from two cameras and map, pair, and apply a tracking algorithm to lacrosse balls being viewed by both cameras.
- Programmed software to utilize position and velocity of lacrosse balls in 3D space to predict which lacrosse ball will arrive at the goal soonest and react accordingly while ignoring other lacrosse balls and false positives.
- Assisted project lead in testing Machine Learning enabled computer vision software for object recognition.

HS Senior Capstone: Segway

April 2018 - June 2018

- · Part of three-person group that built a fully operational Segway over the course of six weeks.
- Designed and implemented PID speed control by measuring platform tilt with an accelerometer + gyroscope sensor.
- Added PID steering control by using a potentiometer to measure angle of sideways-leaning, user-operated mast.
- Collaborated with team members in solving mechanical and software problems encountered during construction and testing processes.

Involvement

Boston College Investment Club

September 2018 - May 2019

Analyst

- Managed app. \$800,000 portion of Boston College's endowment fund with team of student analysts.
- Researched, pitched and presented long-oriented equity positions in front of club.

Boston College Hillel

November 2018- May 2019

Executive Board: Events Coordinator

- Coordinated weekly Shabbat dinners, holiday celebrations, and social events.
- Delegated roles and responsibilities to board members for event preparation.
- Met and partnered regularly with fellow board members to coordinate schedule and ensure proper funding for the year.

New England Swim Inclusion Committee

November 2012 - May 2019

Volunteer

• Fundraised for water safety events and for purchasing swim equipment for underprivileged children and underrepresented groups.

Activities at Northwestern: NU Robotics Club, Club Swimming, MEOR

Experience

Windsor Club

June 2015 - August 2019

Swim Teacher & Lifeguard

- \bullet Supervised morning lap swimmers and monitored chemical levels in the pool.
- Taught swim techniques to children and adults of all ages and skill levels.