Riley Drcelik

Brooklyn, NY | rileydrcelik@gmail.com | 929 404 8843 | rileydrcelik.com | riley-drcelik | rileydrcelik

Experience

Club President — *New York, NY*
BMCC Robotics Club — *Aug 2024 - Present*

- Expanded club membership from 10 to 52 by leading outreach initiatives through advertising, networking at club fairs, and collaborating with classmates
- Directed club operations, managing officers, planning events, and organizing trips; implemented member feedback to create club merchandise and tailored activities to engage beginners in robotics increasing member retention by 150% over previous semesters

Data Science Intern — *New York, NY*
32BJ Benefit Funds — *Jul 2024 - Aug 2024*

- Developed and tested AI models with 90% accuracy using techniques such as XGBoost and Logistic Regression, and analyzed data with heatmaps in Jupyter Notebook
- Enhanced model accuracy from 70% to 90% by applying advanced data cleaning, feature engineering, and selection techniques, including Chi-Square, Mutual Information, and encoding
- Streamlined task management and automated workflows with Azure DevOps and Git, reducing task completion time by 30 hours per month while enhancing collaboration and gaining proficiency in managing tickets and deployments

Research Intern — *New York, NY*
CUNY CiPASS — *Feb 2024 - Jul 2024*

- Investigated relationship between different forces and deformation on 3D printed samples of varying infill patterns (+/-45d to +/-90d)
- Charted and graphed data in excel, observing a linear trend between force applied and deflection. Discovered differences in Young's Modulus between samples of 1.0-2.0GPa
- Authored abstract and created poster with details of research, presented at school-wide poster session

Projects

Macaulay X MTA Datathon *Python, Excel, Pandas, Seaborn* — *Project Link*

- **First Place**, Macaulay Datathon **(20 teams, $2000 prize)**
- Analyzed fare evasion rates across universities, finding 6 of the 7 highest rates occurred at public institutions, while the 7 lowest were at private universities
- Collaborated with team to find $0 solution promoting awareness of FairFares program at CUNYs by advertising on main page, redirecting funds from less effective marketing strategies

SnapSight *Lens Studio, Typescript, Javascript* — *Project Link*

- Prototyped visual aid with small team to assist blind and visually impaired in daily tasks and improve the accessibility of Snapchat Spectacles
- Achieved 95% detection accuracy by leveraging object detection and body tracking technologies to alert users when another person is within proximity

Beaver Bot *Arduino, Inventor, Breadboard, Solder, 3D Printing* — *Project Link*

- Line follower robot for 2024 ASEE robot design competition. **15 teams, 3rd place**
- Utilizes a line follower with PID controls to follow track with 100% success rate. IR distance sensors detect "trees" activating servos swiping sticks into tray which are dumped at finish
- Iterated over multiple designs with team, providing feedback each iteration, improving finish time by 250% (3:56 to 1:28)

Skills

Programming Languages: C++, C, HTML/CSS, Javascript, Python, MATLAB, R
Software: Git, Jupyter Notebook, Excel, Firebase, Vercel, Next.JS, Arduino C, PyTorch

Education

CUNY Borough of Manhattan Community College — *Aug 2023 - May 2025*
AS in Engineering Science

- GPA: 3.7/4.0
- **Coursework:** Data Structures & Algorithims, Circuits, Machine Learning for Data Science, Physics II