

Ryan S. Park

314 Lupine Way, Short Hills, NJ 07078
<https://orangese.github.io/>

201.914.4621
ryanpark314@gmail.com

Education

Millburn High School, NJ

Class of 2022 | GPA: 4.43 | PSAT: 1510 | SAT: 1590

AP scholar with distinction. Wrote 130-page paper on neural networks with original proofs.

Research

V-BIND: Deep Geometric Transformers for SARS-CoV-2 Treatment Design

September 2020 - Present

Created novel AI approach to designing miniprotein drugs for COVID-19 and other spike viruses. Patent-pending. Received AEOP grant; working with Nokia Bell Labs mentor to further research.

X-Net: A Deep Convolutional Neural Model for X-Ray Threat Detection

November 2019 - April 2020

Designed novel convolutional algorithm that outperforms TSA threat detection and speed by 400% and 91x, respectively. Presented research to Ocean County College Board of Trustees.

Awards

Regeneron International Science and Engineering Fair

2021 | Computational Biology | V-BIND | 2nd Grand Category Award

National Junior Science and Humanities Symposium

2021 | Oral Presentation - Computer Science | V-BIND | 3rd in Category

2020 | Oral Presentation - Computer Science | X-Net | 1st in Category

North Jersey Regional Science Fair

2021 | Bioinformatics | V-BIND | 1st, ISEF Grand Prize, Nokia Bell Labs Distinguished Researcher Award

2020 | Computer Science | X-Net | 1st, JEI Exceptional Investigator, KeanU Award, ACM Computing Award

Jersey Shores Junior Science Symposium

2021 | Oral Presentation | V-BIND | 1st Overall

2020 | Oral Presentation | X-Net | 1st Overall

Experience

Artificial Intelligence Program | Founder, President, Course Author

September 2019 - Present

Founded first AI program at Millburn HS. Wrote curriculum and introductory AI library, EasyAI.

AI Security Initiative | Project Head, Lead Developer

November 2019 - Present

Developed facial recognition software and received approval for school usage from district superintendent. Wrote GPU-optimized C++/Python code and led team of student developers.

Computer Science Integrated Initiative | President

September 2020 - Present

Managed large-scale projects, including current sign-in system for students during school day.

Incubating Startup | AI Research Intern

July 2021 - Present

Implemented molecular visualization and ML QSAR Python app for streamlined drug discovery. Working with Northeastern professor to prepare for publication in a peer-reviewed journal.