# Benjamin Murphy Gitai (High School)

21 VERNON CIRCLE PRINCETON, NJ 08540 BD: 08/16/2007 609-865-4712 CLASS OF 2025 PRINCETON HIGH SCHOOL bengitai@gmail.com

#### Education

Class of 2025, Princeton High School Rutgers University Engineering Summer Program, 2023

Princeton Learning Lab, Summer 2024 (summer research program, selected for a healthcare AI project in the Computer Science Dept from 340 applicants)

#### Courses

Princeton University MAT 214 Multi-Variable Calculus & Linear Algebra Algorithms

APs:

Chemistry (5), Computer Science A (4), US History (5), World History (5), Language & Composition (5), Calculus B/C (5), Physics C-M, Statistics, AP Literature

## Honors, Awards, Activities

- Sparrow International Math competition, 1st Place, 2022
- PHS Motor Sport and SIM Racing Club, President
- Hackathons Hack PHS 2022, 2023, 2024
- Tenor Saxophone, 9 years
- 14th IEEE Integrated STEM Education Conference: chosen for oral presentation "Analysis of E. coli growth dynamics during Lambda(vir) phage infection reveals phage decay" Mar. 9, 2024 (only high school student selected for oral presentation)
- First place, Mercer Science and Engineering Fair, 2024
- MSEF Air Force Research Laboratory Award, 2024
- Regeneron Science Talent Search Semi-Finalist, 2025
- Accepted Princeton University CO'29

### **Publications**

Gitai, B. and Sheehan, J. "Analysis of E. coli growth dynamics during Lambda(vir) phage infection reveals phage decay," (2023) bioRxiv doi:

https://www.biorxiv.org/content/10.1101/2023.11.28.56 9039v1

Regeneron STS Paper (Cannot be published):

https://github.com/BenGitai/Computer-Vision-for-Ankle-Replacement-Surgery/blob/main/Computer%20Vision%20for%20Ankle%20Replacement%20Surgery.pdf

# Community Service and Leadership

- Founded the "Games with Friends" club at PHS: Encourages neurotypical and neurodivergent/autistic students to spend time together through board games
- Building Bridges tutoring: Math tutor at Princeton Middle School
- Volunteer coach, Princeton Recreation Center Summer Track program – 2022, 2023, 2024
- TASK (Trenton Area Soup Kitchen) volunteer: packing lunches for homeless clients
- St. Jude's Club (raising money for cancer)

#### **Athletics**

#### Soccer:

- PHS Varsity team, sophomore and junior years;
- 2023 State Champions (top public school in NJ)

#### Track:

- PHS Varsity team, freshman, sophomore, and junior years (2022, 23, 24); Captain, 2024
- Named NJ All State Freshman 2022 (200m)
- New Balance Indoor Nationals, Championship Division, 2022 (SMR)
- Nike Indoor Nationals, Emerging Elite Division, 2022 (4x400m)
- New Balance Outdoor Freshman Nationals 2022 (100m, 200m, 400mH)
- New Balance Outdoor Nationals, Championship Division 2022 (SMR)
- All American, Nike Indoor Nationals 2023 (SMR)
- Mercer County Champions, 2023
- New Balance Outdoor Nationals, Championship Division 2023 (SMR)
- Ocean Breeze Elite Invitational, Elite Division 2024 (300m)
- Nike Indoor Nationals, Emerging Elite Division 2024 (200m)
- Qualified Nike Outdoor Nationals, Emerging Elite Division 2024 (200m,100m)
- Princeton University Track and Field Team Member