

Mideum (Abraham) Park

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Education:

Massachusetts Institute of Technology (MIT) **Cambridge, MA**
Bachelor of Science in Chemical and Biological Engineering (10B) *June 2023*

- Minor in Chemistry and Concentration in Economics
- Relevant coursework: Differential Equations, Physics I & II, Poker Probability, Integrated Chemical Engineering, Biochemical Engineering Laboratory

Skills:

Computer Languages: **Java, Python, MATLAB**
Technologies: **Excel, Pycharm, CAD & 3D Printing**
Languages: **Korean** (native), **German** (beginner); Citizenship: **US Citizen**

Experience:

Computational Materials Design Lab, POSTECH **Pohang, South Korea**
Researcher *May 2025 - Present*

- Surveyed computational modeling tools for electronic-structure of materials (VASP, Quantum EXPRESSO)
- Collaborated with other interns to present findings regarding catalytic tendency of noble metal (Au)

Mycometrics, LLC **Monmouth Junction, NJ**
Laboratory Analyst *Apr. 2023 - Feb. 2024*

- Collected dust samples from clients and ran Polymerase Chain Reaction (PCR) SOP
- Compiled and analyzed data for various species of fungus to report to clients

Private Day Trading **Princeton, NJ**
Fund manager/trader *Jan.- June 2021*

- Managed family funds, trading stocks and ETFs based on self-written algorithmic signals
- Traded on Interactive Broker's IB Trader Workstation Platform, experimenting with leverage

Zhang Group, MIT Department of Chemistry **Cambridge, MA**
Undergraduate Researcher *Sept. 2016 - Feb. 2021*

- Designed molecular dynamics computational Python model using Lennard-Jones potentials
- Simulated nucleosome folding using molecular dynamics software (LAMMPS, AWSEM)
- Collaborated with NIH and Broad Institute groups by providing computational data to experimental groups.

Rider University Department of Chemistry, Biochemistry and Physics **Lawrence, NJ**
Researcher, Project SEED Scholar *June - Sept. 2015*

- Conducted optimization study on an organic reaction in a chemical pathway under Dr. Daniella Jacobs
- Ran GS-MS, NMR and IR machines on regular basis for chemical analytics
- Presented findings at ACS Conference along with fellow project SEED scholars

Leadership:

MIT Undergraduate Association Financial Board **Cambridge, MA**
Senior Board Member, Fundraising Co-chair *Sept. 2018 - June 2021*

- Allocated ~\$800k to various undergraduate student groups with four funding cycles each year
- Coordinated fundraising efforts with the Financial Board and other Undergraduate Association Officers

MIT Class Awareness, Support and Equity (CASE) **Cambridge, MA**
Financial Literacy Chair *Aug. 2018 - June 2019*

- Supported MIT students by creating and organizing various events about financial literacy
- Managed budgets to finance the events

Summer School of Truth **Rosendale, NY**
Teacher's Assistant *Aug. 2016 - Present*

- Mentored the enrollees in any difficulties that they faced, including social, mental or physical frustrations
- Led activities such as: Song Leading, Guitar Service, Cabin Coordinator, Audio Service, and Ushering

Recognitions:

US National Chemistry Olympiad Team Alpha Theta *2015*
West Windsor Plainsboro High School South Team for ARML, HMMT, PUMaC *2014 - 2016*

Other Positions:

Plainsboro Volleyball Camp Assistant Coach/Partner *May. 2022 - Present*
MIT UTOP Tech Tutor *Sept. 2020 - June 2021*
MIT BoSTEM Academy Physics TA *June 2020 - Aug. 2020*
MIT Chemical Engineering Department Associate Advisor *Aug. 2018 - June 2019*
Fraunhofer Institute of Interfacial and Bioprocess Engineering (IGB) Intern *June 2018 - Aug. 2018*
MIT Undergraduate Practice Opportunities Program (UPOP) *Sept. 2017 - Sept. 2018*
MIT Science Olympiad Event Supervisor *Nov. 2016 - Feb. 2017*
ACS Roeser Memorial Scholar *June 2016 - June 2018*