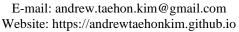


Andrew Kim

Tel: 646-749-6801





Education

COOPER UNION FOR THE ADVANCEMENT OF SCIENCE AND ART, NY, NY

Masters of Engineering and Bachelor of Engineering, **Chemical Engineering**, Projected May 2025 Cumulative GPA **4.0/4.0**.

Tau Beta Pi Fellow, IDC Foundation Innovation Fellow, Dean's List

D	niects	
PVI	110000	

Significant Publications

Work Experience

•	>	Carbon Capture from Air Using Electrospun Polymer Fibers Optimized polymer fiber composition to maximize CO ₂ absorption and stability. Publication of work in progress.	2023- Present
	>	Modeling Surface Adsorption Phenomena for Sodium-Sulfur Batteries Simulated the behavior of sulfur intermediates on adsorptive material surfaces to improve the stability of sodium-sulfur batteries.	2022- Present
	>	Designing Competitive Airplane Drones for International Flight Competition Leading the computational simulation, electronics management, and safety as the VP of Cooper Union's AIAA team to compete against over 100 teams worldwide.	2023- Present
	>	Optimization of Sediment Microbial Fuel Cells Using 3D printing Designed a microbial fuel cell reactor to maximize voltage produced by bacteria in mud as a renewable energy source (work published in 2022).	2021- 2022
<i>†</i>	$\overline{\Delta}$	Journal of Materials Chemistry A . Recent advances in modified commercial separators for lithium-sulfur batteries.	2023
	Δ	Polymer Reviews . Recent Progress in PEG-based Composite Phase Change Materials.	2023
	Δ	Journal of Industrial and Engineering Chemistry. Review on Thin-Film	2023
		Nanocomposite Membranes with Various Quantum Dots for Water Treatments.	
	Δ	Bioresource Technology . Modification strategies of membranes with enhanced Anti- biofouling properties for wastewater Treatment: A review.	2022
	Co	re Technology Intern, OLI Systems, USA	2024
•	•	Trained machine learning models like neural networks and evolutionary algorithms to predict corrosion for alloys for implementation in commercial software.	
	•	Created extensive documentation and tests to communicate the implementation, capabilities, limitations, and next steps for final development by the team.	
	Res	search Assistant, Yonsei University, Korea	2021-
	•	Applied effective project planning, time management, and adaptability to first-author 10 scientific articles while serving in the Korean Military during COVID19.	2023
,	*	President — Chemists' Club, Cooper Union Fostered networking and mentorship between students and professionals in the chemical industry.	2019- Present
	*	President — Tau Beta Pi, Cooper Union	2024-
		Oldest US engineering honor society for top scholars of excellent character.	Present

Skills

Leadership

Software	Python, C++, OLI Studio, ANSYS Workbench, SolidWorks, Gaussian09, ORCA	
Laboratory	Thermogravimetric Analyzer, Electrospinner, 3D Printer, HPLC, GC,	
Equipment	t Various Spectrometers, ¹ H NMR, Tube Furnace	
Skills	Machine Learning, Computational Chemistry, Computational Fluid Dynamics, Web	
	Design, Patent Writing, Graphic Design for Scientific Figures	