RACHEL X. LI

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EDUCATION

HARVARD UNIVERSITY Cambridge, MA
Anticipated A.B. in Statistics. May 2023
Coursework in Computer Science, Statistics, Linear Algebra, English Literature, and Philosophy.
Leadership: Founder and Co-President of Group for Undergraduates in Statistics at Harvard (GUSH)

SPACKENKILL HIGH SCHOOL Poughkeepsie, NY
Valedictorian: GPA 99.15 / 100 (unweighted) June 2019
ACT 36 (36 E, 36 M, 36 R, 36 S); SAT 1560 (780 RW, 780 M); SAT II (Chem: 800, Bio: 800, Math 2: 800); AP: 5 on Calc BC, Chem, Comp Sci, Lang, Lit, Euro, Physics E&M/Mech, Spanish, US History.
Leadership: Science Olympiad Team (*President*), Mathematics Team (*President*), Girls' Varsity Tennis Team (*Captain*), Orchestra (*President*), Student Government (*Class President*, *Schoolwide Secretary*).

Awards and Honors: 2017 Siemens Competition – 2nd Place National Team Winner; 2018 Intel International Science and Engineering Fair (ISEF) – 2nd Place Materials Science; National Gallery for America's Young Inventors Inductee; US National Chemistry Olympiad Honors (National Top 144); Dwight D. Eisenhower Leadership Award; Davidson Fellows Scholarship Honorable Mention; National Merit Scholar; IBM Watson Scholar; AXA Achievement Scholarship; Coca-Cola Scholarship Regional Finalist.

EXPERIENCE

IBM RESEARCH INTERN June 2020 – current

HARVARD COLLEGE CONSULTING GROUP ANALYST February 2020 – current
- Worked in a team to develop a national care-expansion strategy for a Fortune 500 medical devices manufacturer; compiled and analyzed large datasets to evaluate efficiency of service and care nationwide.

ROMULUS CAPITAL CAMPUS ASSOCIATE ANALYST September 2019 – current
- Sourcing and diligence for early stage Seed and Series A startups in B2B enterprise focusing on the application and commercialization of technology with a sector focus in biotechnology.

OJIMA LAB Stony Brook University, NY
Simons Summer Research Fellow June 2018 – August 2018
- Computational chemistry research with Dr. Iwao Ojima to discover drugs for treatment of tuberculosis.
- Performed *in silico* analysis using molecular docking (AutoDock Vina, DOCK6) and molecular dynamics simulation (Amber16 via Stony Brook SeaWulf supercomputing environment); trained 3D-QSAR model to predict antibacterial activity of novel compounds.
- Designed a library of 293 trisubstituted benzimidazole compounds and identified a class of next-generation compounds with promising antitubercular activity.
- Wrote Python and batch scripts to optimize workflow; utilized Bash for molecular dynamics simulation.

GARCIA CENTER FOR POLYMERS AT ENGINEERED INTERFACES Stony Brook University, NY
Garcia Research Scholar June 2017 – August 2017
- Conducted materials science research with Dr. Miriam Rafailovich; designed, synthesized, and characterized a novel hybrid hydrogel material composed of gelatin and F127 to treat dental disease.
- Proposed a model of gelatin-F127 structural interactions and demonstrated hybrid hydrogel as a promising biomaterial that could be used to promote bone regeneration following periodontitis.
- Research presented at 2017 MRS Fall Conference; patent covering hybrid hydrogel material filed.

TECHNICAL SKILLS – R, Java, C, Python, SQL, HTML, CSS, Javascript, Flask, Bash, React