Seohyun Park

835 McMillan St NW, Atlanta, GA 30318 (770) 688 7065 | spark935@gatech.edu | www.linkedin.com/in/spark935/ | U.S. Citizen

Education

Georgia Institute of Technology | Atlanta, GA

August 2024 - Present

Bachelor of Science in Computer Engineering (64/129 Credit Hours Completed | 4.0 GPA) Expected Graduation: May 2027 **Relevant Coursework:** Introduction to Object-Oriented Programming, Fundamentals of Digital Design, Linear Algebra, Multivariable Calculus, Differential Equations, Combinatorics

Skills

Programming: Java, Javascript, HTML, Python (scripting), Bash, Swift

Hardware: Raspberry Pi, Ultrasonic sensors, 3D Printing

Software: MobaXTerm, OpenBabel, AutoDock Vina, AutoDock 4.2, RxDock, Autodesk AutoCAD, Onshape, OpenLane, TCL,

Languages: English (fluent), Korean (native), Spanish (conversational)

Projects

Computational Drug Discovery | Emory Department of Biochemistry, Liang Lab Co-Lead Author & Researcher

December 2022 - Present

Identified inhibitors to the Respiratory Syncytial Virus (RSV) RNA Polymerase within a team-based setting via computational docking to create drug candidates for further vaccine development.

- Initialized and designed a project utilizing computer docking to identify potential inhibitors.
- Successfully converted 6,554 molecule files utilizing Bash scripts and OpenBabel for analysis.
- Co-authored and created figures for a peer-reviewed publication titled "In Silico Identification and In Vitro Validation of Repurposed Compounds Targeting the RSV Polymerase," published in *Microorganisms* (2023); drug patent pending.

Pond Water Microbiology Using a Smartphone Microscope | Governor's Honors Program Team Lead

June 2023 - July 2023

- Built, tested, and modified 7 Onshape-designed and 3D printed microscope attachments.
- Developed a machine learning model using TensorFlow to detect water impurities and identify organisms by drawing bounding boxes around them.

Haptic Distance Feedback for the Visually Impaired | Gwinnett Regional Science & Engineering Fair August 2021 – May 2022

• Designed and built an affordable prototype guidance system for the blind using an Arduino microcontroller, ultrasonic sensors, haptic motors, and C++ programming.

Experience

Aurora Theatre | Lawrenceville, Georgia

January – February 2023

Translator

- Translated and validated over 2,000 lines of Korean subtitles for Kim's Convenience, ensuring cultural accuracy.
- Managed and operated live subtitle displays for 15 theater performances, collaborating closely with the technical team to ensure precise timing and audience engagement during each show.

URS Compliance Services | Duluth, Georgia

June - July 2022

Intern

- Performed detailed data entry, document verification, and contract management for over 500 legal entities using state databases and internal systems to ensure complete accuracy and compliance.
- Streamlined processes for filing, categorizing, and updating legal records, improving workflow efficiency and supporting team operations by creating a 43-page training binder and processing over 300 contracts and documents.

Activities

GT Silicon Jackets (Chip Fabrication Club) | Physical Design Team

August 2024 - Present

• Wrote a Python script to scrape violated paths and average depth from timing analysis reports.

GT IOS (App Development Club) | Loop Team

August 2024 – Present

• Developed proficiency in Swift through collaborative projects and peer learning sessions.

Vex Robotics Team 675A | Head Builder

August 2022 - May 2024

- Qualified for Vex Worlds (an international competition) 2022, 2023, and 2024.
- Taught and trained 20+ new team members about gear ratios, motor usage, and chassis creation.

Atlanta Bethel Church | Youth Head Worship Lead

August 2018 – April 2024

 Supervised a team of 8 instrumentalists and maintained the quality of worship services during practices and performances by directing constructive criticism.