Jaehoon Song

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Software engineer with 4+ years of full-stack and systems development experience. Proficient in Node.js, React, C#, Python, SQL, LaTeX, and more; focused on building reliable, maintainable software demonstrated through open-source contributions.

EDUCATION

Georgia Institute of Technology | Atlanta, GA   *Dec 2025*
Bachelor of Science in Computer Science   GPA: 3.87/4.00

- Completed coursework in Calculus (MATH 1551/1552/2550), Algebra (MATH 1554/2106/3406), Discrete Mathematics (CS 2050/MATH 3012), Differential Equations (MATH 2552), Probability and Statistics (MATH 3215), data structures and advanced algorithms, finite automata and complexity, Number Theory (MATH 4150) with applications in cryptography
- Developed expertise in frontend stack (data visualization, Node.js with React, OpenGL, Unity), project management, design documentation, and verbal and written communication
- Achieved Dean's List recognition, College of Computing, 2022

Gwinnett Technical College | Lawrenceville, GA   *May 2021*
Associate of Applied Science in Computer Science   GPA: 3.96/4.00

- Completed coursework in IT Analysis, Project Management, Advanced Systems Project
- Gained expertise in OS basics, Linux Customization, hardware and low-level languages, Application Development, Database Management Systems, and App Design Architecture (MVC, MVVM, etc.)
- Developed skills in Socket Connections, Beans, Servlets, JSP, RESTful APIs, and Network Configurations and Security
- Earned Java Programmer Certificates and Honor's List recognition

EXPERIENCE

Columbia Academy | Duluth, GA   *Present*
Freelance Lecturer (1099 Contractor)   ⭘

- Instructed mathematics courses including AP Calculus, Linear Algebra, Multivariable Calculus, and Combinatorics for high school students
- Taught programming courses in JavaScript, Java, and Python following Georgia Tech CS 1301 and CS 1331 curriculum standards
- Delivered Physics 1, Physics 2, and Physics C instruction with hands-on laboratory components
- Developed comprehensive SAT bootcamp materials and published open-source educational resources at ydjs-publish repository
- Created structured learning environments for AP Computer Science Principles and advanced mathematics preparation

Georgia Institute of Technology, School of Physics | Atlanta, GA   *Sep 2025*
Teaching Assistant (TA)   📁

- Operated lab sessions for PHYS 2211 by Emily Alicea-Muñoz since January 2023.
- Assisted students in completing lab assignments and understanding physics concepts.
- Developed GlowScript local IDE tools for PHYS2211 and prepared course documentation using LaTeX typesetting system with professional teaching experience
- Applied knowledge of kinematics, dynamics, thermodynamics, energy and momentum in lab instruction
- Earned Faculty Honors from School of Physics, 2023

Georgia Institute of Technology, School of Computer Science | Atlanta, GA   *Dec 2022*
Undergraduate Teaching Assistant (UTA)   📁

- Conducted office hours and recitation sessions of CS 2050 to support student learning in discrete mathematics and related topics under the supervision of the College of Computing faculty.
- Prepared and edited problem sets, solution guides, and recitation handouts using LaTeX and coordinated with instructors to align recitation content with course objectives
- Applied expertise in set theory, proofs, induction, combinatorics, basic graph theory, and introductory algebra/number theory for algorithms and cryptography

SK C&C USA | Suwanee, GA   *Sep 2021*
Software Engineer/Developer

- Developed and operated MES, WMS, and SCM systems for SK Global Battery manufacturing.
- Configured Windows OS and hardware systems, implemented networking (Ethernet) and transfer protocols, developed applications using .NET C# WinForms, and performed Oracle Database Administration (DBA) duties for enterprise systems

PROJECTS

Grady Health System | Atlanta, GA   *May 2024*
Software Engineer/Developer

- Developed a heart-care application to reduce hospital readmissions by detecting complications early from patient-reported data for a year as school coordinated capstone project.
- Technical Experience: System architecture and design documentation, database development with private networking using Apache Derby and custom SQL, mobile app distribution for patients, and secure web portal construction for clinicians

SKILLS

Language Proficiency: English, Korean (Native), Japanese (Intermediate)

Programming Languages: Java/Kotlin, Python, C/C++/C#, SQL (Oracle, MS Access, SQLite, Apache Derby, Postgres), JavaScript (Node.js, React), HTML/CSS, R

Mathematical Tools: LaTeX, Mathematica, MATLAB, NetworkX

Linux Customization: Bash scripting for Linux and OS X, Batch scripting for Windows, Shell scripting, Perl, AWK

Web Frameworks: React, Node.js, Flask, WordPress, FastAPI, Web hosting (Apache Tomcat, AWS)

Testing Frameworks: Selenium, JUnit, Material-UI

Data Science Frameworks: pandas, NumPy, Matplotlib, Scikit-learn, TensorFlow, PyTorch

Databases: Oracle, MS Access, SQLite, Apache Derby, PostgreSQL, MongoDB, Mongoose

Developer Tools: Version Control (Git), GitHub/GitLab, Virtual Machine and Containers (Docker), TravisCI, Google Cloud Platform, Agile workflows, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Other Software: MS Office (Word, Excel, PowerPoint, Outlook), Adobe Design Tools, IDEs, Cloud Services

REFERENCES

Available upon request.