Stella (Minji) Kang

Blacksburg, VA | 540 230 8328 | mkang17@vt.edu | LinkedIn @stellak-VT | GitHub @stellak-vt

OBJECTIVE

Undergraduate student in Applied Discrete Mathematics and Computer Science, interested in artificial intelligence—especially natural language processing (NLP)—and aiming to apply mathematical modeling and programming skills to AI research and development.

EDUCATION

· Virginia Tech — Blacksburg, VA

B.S. in Applied Discrete Mathematics | Minor in Computer Science

Expected graduation: Dec 2026 | GPA: 3.12 / 4.0

PROJECTS

· Skincare Product Recommender | Personal | Blacksburg, VA | Mar 2025 - Present

Creating a rule-based system that suggests products based on user preferences and attributes.

RESEARCH EXPERIENCE

- · Volunteer NLP Research Assistant Digital Libraries | Virginia Tech, University Libraries | June 2025 Aug 2025

 Joining weekly mentoring meetings in preparation for a for-credit NLP research role in Fall 2025. Reviewed Hugging Face Transformers and PyTorch workflows through guided notebooks and Kaggle examples.
- · Research Fellow NSF REU: Machine Learning & Coding Theory | Virginia Tech, Applied Algebra Research Group | Blacksburg, VA | May 2025 Aug 2025

Conducting a paid 12-week research project using Python and PyTorch to apply supervised learning and submodular optimization for improving the efficiency of representative data subset selection in image classification.

WORK EXPERIENCE

· English Instructor | Pagona Language Institution | Siheung, Korea | Feb 2021 – Dec 2021

Instructed 120 students across 13 classes, designing more than 100 customized lesson plans and evaluating student progress weekly.

· English and Mathematics Instructor | KAIST Academy | Siheung, Korea | Jan 2022 - Dec 2022

Taught English and Math to 80 middle and high school students, creating over 60 sets of learning materials and problem sets.

EXTRACURRICULARS (CAMPS / WORKSHOPS / CLUBS)

• Math TA & Outreach | Virginia Tech, Applied Algebra Research Group | Blacksburg, VA | June–July 2025

Taught binary, ASCII, and polynomial math (Lagrange interpolation, Reed–Solomon codes) to 150+ middle and high school students across three separate sessions; supported JMU REU activities on polynomials over finite fields.

· OCR & AI Text Digitization Workshop | Virginia Tech Library | Blacksburg, VA | May 2025

Applied OCR and LLM tools in Python to digitize poor-quality scans using Kaggle, Hugging Face, and Llama in a 3-hour workshop.

- · Artificial Intelligence and Machine Learning Club | Virginia Tech | Blacksburg, VA | April 2025 Present Participating in weekly AI/ML seminars and collaborative ML projects with 200+ members.
- · Math Club | Virginia Tech | Blacksburg, VA | Sep 2024 Present

Attending research seminars and exploring math in real-world fields.

RELEVANT COURSEWORK

· Mathematics at Virginia Tech

Linear Algebra, Modern Algebra, Statistics for Engineering, Discrete Mathematics, Advanced Calculus

· Computer Sciences at Virginia Tech

Software Design and Data Structures I & II, Data Structures and Algorithms, Computer Organization

SKILLS

- · Programming languages: Java, Python
- · Languages: Korean(Native)
- · Tools: Visual Studio Code, Eclipse, BlueJ, Git (basic)