

(530) 574-0614  
868 S 5th St, CA  
sgwlee1227@gmail.com

# Sungwon Lee

## Junior Data Scientist

github.com/sgwlee96  
linkedin.com/in/lee-sungwon

Results-oriented Data Scientist specializing in AI and machine learning. I hold a Bachelor's in Statistical Data Science from UC Davis and am currently pursuing a Master's in Applied Data Science at San Jose State University, expected to graduate in May 2025. On the current project, I am trying to embed ViT-YOLO architecture with different architectures such as Transformer detection head to implement on UAV object. I am eager to leverage my expertise to drive data-driven solutions while contributing to team success and enhancing overall performance.

### SKILLS

<b>Tools and Languages</b>	Git, $\LaTeX$ , MySQL, Python, R, PyTorch, PySpark, Tableau, TensorFlow
<b>Quantitative Research</b>	Machine Learning, Deep Learning, Artificial Intelligence, Computer Vision, Large Language Model, Natural Language Process, Statistics and Probability
<b>Communication</b>	English(Proficient), Korean(Proficient)

### TECHNICAL EXPERIENCE

<b>Data Science Teacher's Assistant</b> <i>San Jose State University</i>	<b>Jan 2024 — Present</b> <i>San Jose, CA, US</i>
---	--

- Led weekly review & demo session, enhancing student understanding of complex mathematical concepts
- Authored lab questions, facilitating hands on learning and reinforcing key concepts
- Led office hours, providing students with assistance and clarifying their doubts on course materials

<b>Marketing Manager at Silicon Valley IT Business Center</b> <i>Korea Trade-Investment Promotion Agency</i>	<b>Aug 2022 — Jul 2023</b> <i>San Jose, CA, US</i>
---	---

- Monitored and analyzed semiconductor market trends to identify opportunities for product and service enhancement
- AI tech industry expert with a strong background in crafting and executing strategic marketing initiatives for IT businesses in Silicon Valley
- Collaborated with global tech leaders and venture capital investors to drive business growth and customer engagement

<b>Data Analyst Intern</b> <i>PMC Corporation</i>	<b>Apr 2021 — Jul 2021</b> <i>Seoul, KR</i>
--	--

- Analyzed and visualized exportation and importation data of the company's chemical products by using SQL, Pandas, and Tableau
- Tracked the latest Southeast Asian trading trend and corresponding raw materials' daily market price
- Collaborated with cross-functional teams to provide actionable insights, helping optimize inventory management and supply chain efficiency

### PROJECTS

<b>Facial Expression Recognition Analysis</b> <i>San Jose State University</i>	<i>San Jose, CA, US</i>
---	-------------------------

- Optimized YOLOv7 for Facial Expression Recognition, achieving 95% accuracy and 93% F-1 score
- Enhanced real-time emotion detection using a data balancing technique that merged 12 emotions into four key categories

<b>Leveraging Sentiment Analysis for Enhanced Stock Price Prediction Using PySpark</b> <i>San Jose State University</i>	<i>San Jose, CA, US</i>
--	-------------------------

- Integrated sentiment analysis using PySpark from financial news with traditional indicators for stock prediction, achieving a 6.36% accuracy boost for NVIDIA using the Random Forest model
- Demonstrated model and stock-dependent impact, with sentiment analysis improving results for NVIDIA but showing mixed or negligible effects for Apple and other models

### EDUCATION

<b>Master's Degree: Applied Data Science</b> , <i>San José State University</i>	<b>Aug 2023 — Present</b>
<b>Bachelor's Degree in Statistics: Statistical Data Science / Minor in Mathematics</b> , <i>University of California Davis</i>	<b>Jun 2022</b>
<b>ADSP(Advanced Data Analytics Semi-Professional) Certificate</b> , <i>KOREA Data Agency</i>	<b>Jun 2021</b>

### ACTIVITIES

<b>Board Member</b> <i>Korean Aggies United</i>	<b>Sep 2018 — Jun 2020</b> <i>Davis, CA</i>
--	--

- Directed and supervised overall operations and coordinated fundraising events for 250 Korean students' alumni connections
- Mentored Freshman Korean students about major courses and academic careers