

# Jiarong Chang

Graduate Student in Computer Science

✉ jiarong20001101@gmail.com

☎ 201-204-2111

📍 Hoboken, NJ 07030

🌐 [linkedin.com/in/jiarong-chang-b9058b285](https://www.linkedin.com/in/jiarong-chang-b9058b285)

## Profile

---

Dedicated graduate student skilled in designing, developing, and addressing complex web applications using Python, Java, JavaScript, and other technologies. Experienced in delivering successful projects, including a travel website and an award-winning interactive volleyball application.

## Education

---

2023/09 – 2025/05 Hoboken, NJ	<b>Master of Science (M.S.) – Computer Science</b> <i>Stevens Institute of Technology</i>
2019/09 – 2023/06 Taipei, Taiwan	<b>Bachelor of Science (B.S.) – Computer Science and Information Management</b> <i>Soochow University</i>

## Projects

---

2024/08	<b>Bottled Liquefied Petroleum Gas Delivery Prediction System</b> <i>Python, Tkinter, SQLite</i> <ul style="list-style-type: none"><li>Developed a Python-based system using tkinter and sqlite3 to assist accounting staff in analyzing each customer's average reorder interval and predicting the next bottled gas delivery.</li><li>Implemented a visual dashboard to help employees forecast when customers are likely to place their next order, enabling faster responses, ensuring timely deliveries, and enhancing customer satisfaction by preventing stockouts.</li></ul>
2024/05	<b>NBA Player Performance and Salary Analysis</b> <i>Python, PCA, K-Means, Hierarchical Clustering</i> <ul style="list-style-type: none"><li>Analyzed NBA player performance metrics and salary data using Python, applying machine learning techniques including Principal Component Analysis (PCA) and clustering algorithms (K-Means, Hierarchical).</li><li>Developed visualizations to illustrate the correlation between Player Efficiency Rating (PER) and salary across different player clusters.</li><li>Potential Impact: Insights can guide NBA teams in optimizing player contracts and budget allocation.</li></ul>
2022/12	<b>Interactive Volleyball Training Application</b> <i>Android Studio, Flask, Figma, OpenCV</i> <ul style="list-style-type: none"><li>Developed an Android app to track and analyze volleyball performance.</li><li>Integrated Flask for backend data management and Android interface for real-time training feedback, increasing user engagement.</li></ul>
2022/07	<b>Filter the students interested in remote or physical class</b> <i>Python, Jieba, Native Bayes Classifier, TF-IDF, Scikit-learn</i> <ul style="list-style-type: none"><li>Trained a machine learning model to analyze public attitudes toward remote and in-class learning.</li><li>Leveraged data crawling, natural language processing techniques, and sentiment analysis to extract meaningful insights over time.</li></ul>

2022/06	<b>Sunshine Travel</b> <i>JavaScript, Figma, HTML, CSS,</i> <ul style="list-style-type: none"> <li>• Led the development of a travel website, creating the user interface in Figma and coding the front-end using HTML, CSS, and JavaScript.</li> <li>• Improved navigation and user experience through optimized design and responsive layout.</li> </ul>
2021/12	<b>Stock Analysis</b> <i>Python, MongoDB, Web Scraping</i> <ul style="list-style-type: none"> <li>• Built a stock market analysis tool that uses Python to gather and analyze financial data.</li> <li>• Implemented candlestick chart, moving averages, and technical indicators (Golden Cross, RSI) for trend analysis.</li> </ul>

## Awards

---

2022	<b>Finalist, International ICT Innovative Services Awards</b> <i>Issuers: Administration for Digital Industries, Department of Information and Technology Education, and Chinese Society for Information Management</i> <ul style="list-style-type: none"> <li>• Recognized among 300+ participants for the development of an <b>Interactive Volleyball Training Application</b>. The project integrated Android Studio, Flask, and OpenCV to deliver real-time feedback, significantly enhancing volleyball training efficiency and user engagement.</li> </ul>
2022	<b>Third Place, Information Management Project Competition</b> <i>Issuer: Department of Information Management, Soochow University</i> <ul style="list-style-type: none"> <li>• Awarded for the same <b>Interactive Volleyball Training Application</b> in Soochow University's internal competition. This application demonstrated innovation in combining data management and real-time performance tracking, setting a benchmark for interactive training tools.</li> </ul>

## Extracurricular Activities

---

2021 – 2022 Taipei, Taiwan	<b>Soochow University Volleyball School Team</b> <i>Captain</i> <ul style="list-style-type: none"> <li>• Led the team in participating in competitions and resolved conflicts between team members.</li> <li>• Strengthened my coordination, organization, and leadership skills by being a reliable team captain.</li> </ul>
2019 Hualien, Taiwan	<b>Youth Leadership Summit</b> <ul style="list-style-type: none"> <li>• Collaborated on a project analyzing strategies for building a personal brand as an internet influencer.</li> <li>• Developed resilience and teamwork through adversity-focused project delivery.</li> </ul>

## Technical Skills

---

### Programming Languages:

Python, Java, C#, JavaScript, HTML, CSS, R, SQL, Bash

### Database:

MySQL, SQLite, PostgreSQL, MongoDB

### Productivity & Data Tools:

Microsoft Excel, Microsoft PowerPoint, Microsoft Word,  
Google Sheets, Google Docs, Tableau

### Frameworks & Tools:

Flask, Android Studio, Tkinter, Scikit-learn, Figma,  
Bootstrap, React, Hadoop

### Machine Learning & Data Analysis:

PCA, K-Means, Naive Bayes, Clustering Algorithms,  
TensorFlow, Pandas, NumPy, Matplotlib

## Languages

---

- Mandarin Chinese (Native)
- Taiwanese (Native)
- English