

Jason Lei

Fort Lee, NJ | 201-660-4292 | 22jasonlei@gmail.com | [LinkedIn](#) | [GitHub](#) | [Personal Website](#)

EDUCATION

Rutgers, The State University of New Jersey

Bachelor of Science in Computer Science

New Brunswick, NJ

Expected December 2024

- **GPA:** 3.349/4
- **Major Coursework:** Data Structures, Computer Architecture, Systems Programming, Design and Analysis of Computer Algorithms, Software Methodology, Introduction to Data Science, Principles of Programming and Data Management, Discrete Structures, Principles of Programming Languages

TECHNICAL SKILLS

Languages: Java, Python, C, SQL (Postgres, MySQL), JavaScript, HTML, CSS, LaTeX

Frameworks: Bootstrap, JavaFX, Flask, Apache HaDoop, Scikit-Learn

Libraries: React.js, Node.js, Pandas, NumPy, Matplotlib, BeautifulSoup

Developer Tools: Git, VIM, VS Code, Eclipse, Linux, Android Studio, IntelliJ

Concepts: Objected-Oriented Programming, Data Analytics, Agile, Software Testing, Version Control, Data Mining

PROJECTS

Collaborative Filtering for Recommendation Tasks | *Python, Pandas, NumPy, Matplotlib, Scikit-learn*

- Built a user-based recommendation system using collaborative filtering techniques, leveraging matrix factorization and cosine similarity to predict user preferences.
- Preprocessed and cleaned large-scale e-commerce datasets, dividing them into training and testing subsets for efficient and accurate model validation.
- Designed and evaluated recommendation performance using metrics like MAE, RMSE, precision, recall, and NDCG, optimizing the algorithm for scalability and accuracy.

MyShell: Unix Shell From Scratch | *C, Linux, POSIX, Makefiles, Git*

- Developed a Unix-inspired shell featuring interactive prompts, batch mode functionality, and command parsing for user input.
- Implemented process creation and management with fork and exec, execution of external commands with pipelines.
- Engineered functionality for wildcard expansion, error handling, and file redirection using dup2 for optimized system performance.

BuyMe Auction Platform | *Java, JavaScript, HTML, MySQL, JDBC, Tomcat, Git*

- Led a team to develop a local online auction platform featuring automated bidding, user alerts, and account management.
- Implemented multi-threading in Java to refresh and update auction listings, enhancing timing precision by 85%.
- Optimized search functionality by utilizing hash tables and caching, resulting in a 25% reduction in search times.

EXPERIENCE

IT Specialist Intern

May 2024 – Aug 2024

Bunchful

Remote

- Provided level 1 help desk support, troubleshooting network and system issues to maintain optimal IT service continuity.
- Developed an AI-powered content management tool using Python and third-party APIs to automate social media posting across platforms such as Medium and Facebook.
- Collaborated with the IT team on cloud solutions, storage, and AI/ML applications to improve existing platforms.