

# Jason Lew

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GitHub: [github.com/jasonlewcodes](https://github.com/jasonlewcodes) ★ Personal Website: [jasonlewcodes.github.io/Jason-Lew-Personal-Site](https://jasonlewcodes.github.io/Jason-Lew-Personal-Site)

## EDUCATION

### **Bachelor of Science, Computer Science**

**Expected Graduation: May 2025**

New Jersey Institute of Technology

Albert Dorman Honors College

- Double Minor in Applied Statistics and Business
- Relevant Coursework: Programming Language Concepts, Data Structures & Algorithms, Introduction to Data Science, Probability and Statistics, Linear Algebra, Differential Equations
- Dorman Honors Scholar – Full Tuition Merit Scholarship
- GPA: 4.0/4.0

## WORK EXPERIENCE

**Software Engineering Intern** - PerfectRec Inc., Seattle, WA

**May 2022 - Present**

- Implement 4 major software development projects to build parts of PerfectRec's web application using JavaScript & TypeScript, HTML, CSS & TailwindCSS, React, NextJS, and PostgreSQL.
- Apply data science to develop PerfectRec's laptop recommendation model powered by mathematical modeling using Pandas in Python (model NDCG = 0.578).
- Contribute 6,000+ lines of code to live site and data science repository.

**Honors First-Year Seminar Teaching Assistant** - Albert Dorman Honors College, Newark, NJ **Sept. 2022 - Dec. 2022**

- Prepared 20+ first-year Honors students for college life and Honors College's requirements.
- Graded assignments and tracked growth and progress of 5 Honors students.

**Undergraduate Research Assistant** - New Jersey Institute of Technology, Newark, NJ

**Feb. 2022 - Aug. 2022**

- Assisted researchers and graduate students in exploring interactive data science.
- Produced statistics for a new sequential triangle counting algorithm in Python to scale  $2^{20}$  vertices.
- Submitted paper: [A Novel Parallel Triangle Counting Algorithm with Reduced Communication](#) (arXiv:2210.00389)

## PROJECTS

### **Cervical Cancer Classification**

#### **Machine Learning Model**

- Classify cervical cancer diagnosis using dataset of 30+ risk factors and 800+ data points using Numpy, Pandas, Seaborn, Pyplot, and Imblearn in Python.
- Implement Logistic Regression model using SKLearn with 99%+ accuracy and visualize model statistics.

### **Personal Portfolio Website**

- Develop personal portfolio site using JavaScript & TypeScript, HTML, CSS & TailwindCSS, React, and Gatsby hosted through GitHub Pages.
- Display programming projects in a pre-rendered webpage for fast load time.

### **Programming Language Lexical**

#### **Analyzer, Parser, and Interpreter**

- Assemble lexical analyzer with 33 token types, top-down recursive descent parser, and interpreter for programming language with 19 grammar rules.

## LEADERSHIP & ACTIVITIES

**Chapter Treasurer** - Alpha Phi Omega Service Fraternity

**Jan. 2023 - Present**

**Jersey Cares Volunteer** - Branch Brook Park, Newark, NJ

**Apr. 2022 - Present**

- Spend 15+ hours per semester maintaining care of the park in Branch Brook Park in Newark.

## SKILLS

- Front-End: JavaScript & TypeScript, HTML, CSS & TailwindCSS, React, NextJS, Gatsby
- Back-End: Python & Pandas, Java, C++, PostgreSQL
- Misc.: Git, GitHub Actions, MATLAB