

# BRICE PATCHOU

patchou@usc.edu | (301)-624-9842 | [www.linkedin.com/in/brice-patchou](https://www.linkedin.com/in/brice-patchou) | Los Angeles, CA

## EDUCATION

University of Southern California, Viterbi School of Engineering

Los Angeles, CA

Computer Science and Business Administration Bachelor of Science

May 2026

Honors: USC Presidential Scholar, Viterbi Scholar, Dean's List Recognition (2023-2024), Peer Mentor Certification

Relevant Coursework: Principles of Software Development(A), Data Structures and Algorithms (A)

GPA: 3.63

## PROJECTS

Trojan Marketplace

USC Viterbi School of Engineering

Student Developer

December 2023

- Spearheaded a student team to build a Next.js-based marketplace, enhancing school commerce efficiency.
- Employed Tailwind CSS and DaisyUI for a responsive frontend to implement four out of eight core features.
- Led team meetings to prototype and structure the site with Figma and Lucidchart, streamlining development.

Restaurant Review Website

USC Viterbi School of Engineering

Student Developer

December 2023

- Developed an interactive frontend for a restaurant review website using HTML, CSS, JavaScript, and jQuery to facilitate seamless navigation.
- Integrated Google Maps and Yelp APIs to enable advanced search functionality, allowing users to filter restaurant options based on location, cuisine, and ratings, improving result accuracy.
- Designed and implemented a secure user database using SQL and Java, safeguarding personal details.

Optical Character Recognition Project

USC Viterbi School of Engineering

Student Developer

November 2022

- Developed an OCR system for two PNG images containing Arial font numbers.
- Employed iterative image analysis with Breadth First Search to create number bounding boxes.
- Utilized features like center of mass and symmetry, leading to a successful OCR system with high accuracy in number recognition and arithmetic operations

## WORK EXPERIENCE

Sponsors for Educational Opportunity

Remote

Tech Developer Intern

August 2024 - May 2024

- Completed 300+ hours of rigorous training focused on data structures, algorithms, and full-stack web development.
- Led small discussion/review sections for 10-20 students to reinforce course concepts and foster active learning.
- Developed software in SCRUM-like teams, designing, testing, and implementing full-stack applications with Python (Flask), MySQL, HTML, JavaScript, CSS, and APIs.

University of Southern California

Los Angeles, CA

Undergraduate Teaching Assistant

August 2023 - May 2024

- Conducted regular office hours to offer academic support and address student inquiries.
- Led small discussion/review sections for 10-20 students to reinforce course concepts and foster active learning.
- Provided grading assistance for assignments, exams, and projects under instructor guidance for a 400-student C++ class.

## LEADERSHIP AND INVOLVEMENT

National Society for Black Engineers (NSBE)

University of Southern California

Senator

September 2023 - May 2024

- Improved the representation of black engineers in the tech industry and at USC.
- Attended National and Regional NSBE Conferences to voice the opinions and concerns of NSBE members in decision-making processes.

Center for AI in Society (CAIS++)

University of Southern California

Cohort Member

September 2022 - Present

- Committed 3-4 hours a week learning Python and Deep Learning methods through the club's curriculum.
- Constructed a Neural Network that used timbre values to determine what year a song came from.
- Integrated Transfer Learning and Fine Tuning to create a Neural Network that could differentiate pictures of chihuahuas and muffins.

## SKILLS

Software: Java, Python, C++, Pandas, Scikit-Learn, TensorFlow, PyTorch, Matplotlib, NextJs, SQL, DaisyUI, Flask, JavaScript

Languages: French (Fluent), Russian (Conversational)