BRICE PATCHOU

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EDUCATION

University of Southern California, Viterbi School of Engineering

Los Angeles, CA

Computer Science and Business Administration Bachelor of Science, GPA: 3.63

May 2026

Honors: USC Presidential Scholar, Viterbi Scholar, Dean's List Recognition (2023-2024), Peer Mentor Certification Relevant Coursework: Principles of Software Development, Data Structures and Algorithms, Applied Business Statistics

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

December 2023

Student Developer

- Developed an interactive frontend for restaurant review website using HTML, CSS, JavaScript, and jQuery for 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

November 2022

- Student Developer
 - 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

SEO EDGE Participant

July 2024 - Present

Tech Developer Intern

August 2023 - 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

Center for AI in Society (CAIS++)

University of Southern California

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.

National Society for Black Engineers (NSBE)

University of Southern California September 2023 - May 2024

Senator

Cohort Member

- 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.

SKILLS

Software: Java, Python, C++, Pandas, Scikit-Learn, TensorFlow, PyTorch, Matplotlib, NextJs, SQL, DaisyUI, Flask, JavaScript **Languages:** French (Fluent), Russian (Conversational)