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 — 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

University of Southern California — Los Angeles, CA
Undergraduate Teaching Assistant — August 2023 - Present
- 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.

Viterbi Summer Institute — Los Angeles, CA
Resident Assistant — May 2023 - July 2023
- Collaborated with the Center for Engineering Diversity to foster a welcoming and safe environment for incoming freshmen from historically underrepresented backgrounds.
- Hosted 10 community-building activities and helped mentor ≈ 50 students.

Code Ninjas — Frederick, MD
Sensei — June 2021 - June 2022
- Trained 50 students ages 6-14 on game modification to publish games, such as Minecraft.
- Increased cohort participation in yearly-round cohort by 8%.

LEADERSHIP AND INVOLVEMENT

National Society for Black Engineers (NSBE) — University of Southern California
Senator — September 2022 - Present
- 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, Tailwind, DaisyUI, Figma, JavaScript
Languages: French (Fluent), Russian (Conversational)