Chandni Sacheti

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EDUCATION

Columbia University New York, NY
MS in Biomedical Engineering, Specialization in Neural Engineering Expected Dec 2027
Relevant Courses: Deep Learning for Biomedical Signal Processing, Advanced Applied Linear Algebra, Signal Processing in Medical Devices, Optical Systems and Networks

University of California, Los Angeles (UCLA) Los Angeles, CA
BS in Cognitive Science, Minor in Entrepreneurship, GPA: 3.92 Jun 2026
Relevant Courses: Cognitive Neuroscience, Reinforcement Learning, Behavioural Neuroscience, Biotechnology & Society, Quantitative Psychological Statistics, Human Sensory & Perceptual Systems, Neurological Disorders

WORK EXPERIENCE

Laboratory for Intelligent Imaging and Neural Computing New York, NY
Research Assistant, Columbia University Aug 2026 - Present
- Building deep learning models in PyTorch to forecast arousal escalation from peripheral physiological signals (HRV, EDA, respiration, pupillometry) ahead of threshold crossing, applying time-series forecasting to support real-time detection
- Conducting per-subject feature attribution analysis to identify individualized physiological predictors of arousal
- Designing a closed-loop experimental protocol integrating real-time arousal decoding with transcutaneous vagus nerve stimulation (tVNS) for a novel stress-regulation study

Wave Neuroscience Newport Beach, CA
Product Development & Data Science Intern Jun 2025 - Aug 2025
- Spearheaded a 5-person engineering team to design an at-home brain optimization system integrating consumer EEG with guided TMS, benchmarking 8 devices down to 1 to build the EEG-TMS integration pathway anchoring Wave's forthcoming product line
- Led a 20-participant validation pilot across 60 sessions, designing neurophysiological (IAF accuracy vs. clinical-grade reference, PSD) and usability metrics that validated and built the technical and business case for productization
- Analyzed 1,000+ patient EEG and treatment records to identify biomarkers of response, informing redesign of clinical protocols and next-generation neurostimulation products
- Developed an AI-driven RAG chatbot to train clinicians and support internal L&D, using GPT-4 and Pinecone for semantic retrieval over 500+ pages of internal EEG, IAF, and TMS protocol documentation, achieving 92% retrieval accuracy

Lives Without Knives (LWK) Hong Kong & Los Angeles, CA
Founder & Executive Director Sep 2019 - Present
- Founded and scaled a social enterprise to a team of 30+, launching user-centric products and securing 30+ strategic partnerships to connect 150+ plant-based brands to new markets
- Produced 10+ large-scale campaigns for 1,000+ attendees, including UCLA's first Plant-Powered Revolution, large-scale festivals, conscious markets, and CSR programs with Verizon
- Spoke at 20+ industry events across Asia and the U.S., expanding brand visibility across media and panels including HK SDG Summit, RTHK Radio, and LA Climate Week, UnChained TV Inspired Magazine

PROJECTS

AI x Healthcare Product Space Hackathon | 1st Place Winner Los Angeles, CA
Reflex: EMG-Integrated Biomechanics Platform Aug 2025 - Aug 2025
- Architected and pitched an 8-channel EMG sensor-embedded apparel platform with AI-driven analytics, decoding real-time muscle activation across major lower-body muscle groups to flag imbalances against ideal movement benchmarks
- Designed end-to-end EMG data pipeline (8-channel acquisition, feature extraction for contraction power and muscle distribution) with AI-driven visualization, paired with a 3-phase go-to-market model for fitness and clinical markets

CruX Neurotechnology at UCLA Los Angeles, CA
Lead Project Manager Sep 2024 - Jun 2025
- Launched NEUROHACK 2026, UCLA's first neurotechnology hackathon, drawing 100+ participants across 20+ teams
- Moderated the "Future of Focus" panel and secured EMOTIV and NeuroGum as prize sponsors, culminating in a Demo Day where top teams pitched working prototypes to industry judges

SKILLS & INTERESTS

Programming: Python, MATLAB, R, C++, RAG
Public Speaking: UCLA Tour Guide, Guest Host at Hashtag Impact Podcast, NeuroGum Brand Ambassador, Simply Neuroscience Podcast Host
Awards: Student of the Year Community Contributor Merit Award; ESF Chairman's Award for Excellence; Lion Award for Extraordinary Achievements; Sir Edward Youde Scholarship
Interests: Waterfall Hiking, Global Plant-Based Cuisine Cooking, Kayaking, Camping, Vinyasa Yoga