

Noah Guzmán

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PROFESSIONAL EXPERIENCE

Human-Centered UX Research Consultant (Freelance)

September 2019 – Present

- Conduct guerilla user research to create product roadmaps, user personas, journey maps, wireframes, and Figma prototypes for multiple software startup companies, enabling rapid progress through the product development lifecycle.
- Synthesize research findings for clients, uncovering broad market views, consumer insights, and customer pain points and sentiments to identify opportunities for the development of new products, features, and strategies.

California Institute of Technology

Pasadena, CA

Ph.D. Research and Data Analyst

September 2019 – June 2023

- Designed and developed video games and interfaces for experimental psychology studies using HTML and JavaScript. Prototype app interfaces and stimuli using Figma and Unity. Deployed studies as interactive digital apps via cloud platforms, executing projects in a timely manner to meet deadlines and prioritize research opportunities.
- Managed and executed impactful research plans for usability, A/B, and play tests with dozens of users, extracting actionable insights to ideate, evaluate, and improve video game and interface designs. Recruited participants methodically.
- Designed and executed hands-on end-to-end research with users from diverse backgrounds, utilizing a wide variety of methods including in-depth interviews, focus groups, task analysis, survey design and response effects analysis, and concept testing, incorporating research insights, user needs, and technical requirements into user-centered solutions.
- Innovated and developed new approaches to measure and analyze user behavior and attitudes. Developed Bayesian models and hypothesis tests of user behavioral data using Python, R, and Stan. Upheld rigorous standards for statistical inference by using robust model validation methods. Synthesized metrics and dashboards for stakeholders.
- Coded and designed interactive web applications to conform to current ISO accessibility standards and HHS usability guidelines across multiple platforms. Independently took ownership of design, programming, and research work.
- Programmed artificial agents and compared their behavior to human-in-the-loop tests, providing insights into users' mental models and sources of human error. Used data to develop user stories and intelligent system interactions.
- Wrote research ethics and design process documentation for consumption by peers and regulatory agencies, advocating for users' wellbeing and enabling efficient execution of research plans in an ambiguous and fast-changing environment.

Brandeis University

Waltham, MA

Research Assistant, Marder Lab

Jan. 2017 – Aug. 2019

- Illustrated complex concepts and communicated research findings to diverse audiences with compelling written reports and creative in-person presentations, driving innovation in the field and increasing adoption of frameworks.
- Developed robust interdisciplinary project proposals and research plans with cross-functional stakeholders.
- Designed neural network, machine learning, and control system models and programmed simulations and analyses in Matlab, Java, Python, and Julia.

California State University Long Beach

Long Beach, CA

Research Assistant, Tsai Lab

Aug. 2015 – Aug. 2016

- Quantitatively analyzed psychobiological data using statistical methods in Microsoft Excel and SPSS. Developed the information architecture and graphics for translating these findings into clear strategic narratives for stakeholders.

SKILLS

Programming Languages and Software: Java, Python (Pandas, Scikit-learn, Numpy, Matplotlib, PySpark), Stan, Julia (Flux, Turing, Plots, Plotly), HTML, JavaScript (p5.js, SurveyJS, D3.js, React), CSS, R, Mathematica, MATLAB, Shell scripting (Bash, SLURM), SQL, Idyll, LaTeX, Markdown, Linux, Unity, Microsoft Excel, Google Firebase, Amazon Web Services, Git, Qualtrics, Prolific, SPSS, Figma, Inkscape, TikZ, Adobe Creative Suite, PowerBI, Spark, Tableau.

Research and Project Management: Spanish, card sorting, journey mapping, Agile, competitive audits, market research.

EDUCATION

California Institute of Technology

Pasadena, CA

Master of Science in Computation and Neural Systems

GPA: 3.8

Brandeis University

Waltham, MA

Combined Bachelor of Science/Master of Science in Neuroscience, Minor in Mathematics

California State University, Long Beach (Transferred)

Long Beach, CA

Pursued two years of a Bachelor of Arts in Graphic Design prior to Brandeis University.

Relevant coursework: fundamentals of graphic design, industrial design, physical and digital media

Coursera Certification in Model-Based Systems Engineering (MBSE)

Credential ID: LVSZ3LQ5S2DJ