Pa Chang Vang

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EDUCATION

University of Minnesota, Twin Cities (UMN) | Minneapolis, MN   Expected May 2026
MS Human Factors and Ergonomics
- **Relevant Courses**: Usability and Human Factors; User Interface Design; Qualitative Research Methods; Quantitative Research Methods & Data Visualization; Wearable Technology

The College of Saint Scholastica (CSS) | Duluth, MN   Completed December 2020
BA Psychology | Minor in Biology

EXPERIENCES

Human Factors Engineering & User Experience Intern | Medtronic   August 2024 - Present
- Support user-centered design activities such as customer needs identification, user profile definition, task analysis, user interface design, use error analysis, usability testing, and post-launch outcomes analysis
- Design and conduct usability assessments of products under development; assist in the analysis and reporting of test results
- Assist in task analysis to determine potential causes of and mitigations for use errors in products being developed

Experience Research & Design Intern | Highmark Health   May - August 2024
- Assisted in exploratory primary and secondary user research for women's health, supporting a total of 29 semi-structured interviews and synthesizing over 200+ data points from qualitative research
- Delivered and designed a qualitative report with actionable insights to key stakeholders and project sponsors, refining qualitative data into jobs to be done (JTBD) for a beta Qualtrics survey to suggest missed business opportunities
- Contributed to a total cost saving of $300K per year for supporting in-house qualitative and quantitative research with a lead design strategist, senior market research analyst, and principal research strategist

Graduate Research Assistant | University of Minnesota   August 2023 - Present
College of Design, Design Research Lab
- Analyze and synthesize qualitative data points on NVivo, using deductive and inductive coding for 30 prototype tests
- Oversaw over 60 A/B usability tests of prototypes with design teams and stakeholders, gathering over 200 survey responses for a 60+ participant sample with a publication at the 23rd annual ACM Interaction Design and Children (IDC) Conference
- Conducted a comprehensive literature review by consolidating 80+ literature via qualitative open coding and thematic analysis; designed mixed-method research (interview, field observation, survey) per the Institutional Review Board

Research Fellowship Intern | University of Minnesota   May - August 2020
Neuroimaging for Cognitive Neuroscience Program
- Developed an experimental method using Python for an emotion-stimuli task and analyzed quantitative data using Intraclass Correlation Coefficient (ICC) analysis within 10 weeks in the Decision-Making Lab
- Presented the research study on emotional differentiation (ED) in the 3rd Annual Summer Research Program 2020

TRIO McNair Researcher | The College of Saint Scholastica   May 2019 - April 2020
Department of Psychology, TRIO McNair Scholars Program
- Designed surveys to investigate the relationship between resilience and emotional intelligence (EI) for first-generation and non-first-generation college students (NFGC), to improve support systems and student experiences
- Synthesized over 40+ pieces of literature, continued data collection of 150+ survey responses, analyzed quantitative data using SPSS, and presented poster at multiple conferences (i.e. National McNair Conference, Twin Port Undergraduate Psychology Conference (TPUP), Scholarship and Creative Arts Weeks Conference (SCAW), etc.)

SKILLS & INTERESTS

Computer: Google Suite, Microsoft Office (Excel, Powerpoint), Figma, Miro, Procreate, Visual Studio Code
Design Skills: User Research, User Interface Design, Prototyping, HTML & CSS (Web Design)
- **User-centered design methodologies**: User Profile Definition, Cognitive Walkthrough, Task Analysis, Usability Testing, Survey Design, User Interviews, Focus Groups, Observations/Field Studies, Contextual Inquiry, and Expert Evaluation Cognitive Walkthrough, Heuristic Evaluation, Design Thinking, A/B Testing

Research Skills: Literature Review, Experimental Design, Data Collection, Statistical Analysis, Qualitative Data Analysis, Conference Presentation, Technical Writing, Project Management, Research Protocols, Human Factors Evaluation
- Familiarity with relevant regulations and standards such as FDA guidelines and IEC 62366

Languages: English, Hmong (Fluent)