

SABID BIN HABIB PIAS

sabidbinhabib@gmail.com ◇ [LinkedIn](#) ◇ [Website](#) ◇ [Google Scholar](#)

SUMMARY

Human factors researcher with four years experience conducting human subject experiments and managing research projects. Skilled at storytelling by transforming analytical data into compelling narratives.

EDUCATION

Indiana University Bloomington

Expected Graduation: July 2025

Ph.D. in Computer Science and HCI

· **Interest:** UX Research, User-centered Design, Responsible AI Design

TECHNICAL SKILLS

Languages and Frameworks Python, R, Flask, React, PyQt, LIME, SHAP, JavaScript

Research Methods

Mixed Methods, Card Sorting & Tree Testing, Usability & A/B Testing
Interviews, Diary Studies, Focus Group Study, Online Survey

Data Analyses

Descriptive and Inferential Analysis, Thematic Analysis, Content Analysis
T-test, Regression, ANOVA, Mixed Effect Model, Non-parametric tests

WORK EXPERIENCE

Indiana University

August 2019 - Present

Graduate Research Assistant

- Persuasiveness of Conversational Assistants' (CA) in Online Shopping: Evaluated the impact of CAs' anthropomorphic vocal tones on consumer engagement through **user studies and A/B testing**, achieving an **18% improvement in persuasiveness** with neutral and positive tones over negative ones. [PDF]
- User-Centered XAI: Evaluated usability of explanation lengths in **explainable AI (XAI)**, discovering a **15% reduction in user acceptance** of lengthy explanations versus no explanation among **users with low technological comfort**. Presented in ACM CHI 2024 workshop on Human-Centered XAI.
- Privacy Education with LLM: Generated contextual nudges through **one-shot prompt engineering** to guide users toward privacy-conscious decision-making; achieved a **13% reduction in privacy-violating actions** and a **16% decrease in cognitive load** during task execution.
- Decision Awareness for LLM Recommendations: Designed and prototyped a voice agent using GPT-4 API and Amazon Polly, incorporating varying vocal tones. Conducted **semi-structured qualitative interviews** to evaluate whether these interventions improve users' decision-making awareness.

Idaho National Lab

June 2023 - August 2023

Python Programmer Intern

- Explainable AI (XAI) in Power Plant Fault Prediction: Developed a high fidelity **explainable AI** prototype interface using LIME and SHAP for water pump fault prediction. **Quantitative survey** exhibited significantly **improved operator satisfaction (23%) and perceived ease of use (14%)**.

Field Information Solutions GmbH

2017 - 2019

Android Application Developer

- Collected user insights for Android app frontend using **card sorting and tree testing**; designed dynamic interfaces for **eight organizations** and **3000 low-tech users**.

SELECTED PUBLICATIONS

Recovering Trust Erosion in AI-assisted Devices (Accepted)

ACM FAccT 2025

Persuasiveness of Voice Assistant's Vocal Tones (**Best Paper Award**)

ACM CUI 2024

Explainable AI on User Personality

HCXAI Workshop, CHI 2024

Improving Privacy with Decaying Photos

ACM CSCW 2022