

# Abhraneel Sarma

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## Education

**University of Michigan School of Information** Ann Arbor, MI  
MS in Information | HCI & Data Science Specialization 2016 - 2018

**Indian Institute of Technology Guwahati** Guwahati, India  
Bachelor of Design | Minor in Mechanical Engineering 2012 - 2016

## Experience

### Research Assistant

University of Michigan School of Information, Ann Arbor Oct 2016 - Present

- Designed and implemented a survey to study the effects of different visual representations of statistical data on interpretation of uncertainty.
- Analysed the responses using bayesian mixed-effects and item-response theory models to compare the effects of different visual representations.

### User Experience Intern

Academic Innovation, University of Michigan, Ann Arbor May - Aug 2017

- Conducted 7 usability tests to evaluate new designs of ART - a tool to explore UM course data. Analysed and reported on findings which informed 5 UI changes.
- Developed an interview protocol to explore user attitudes towards the current features, and identify design requirements for future versions of the tool.

## Projects

### Analysis of the effectiveness of storytelling and interactivity in InfoVis

Master's Thesis Project Jun - Apr 2017

- Designed and conducted a study on MTurk to compare effectiveness of narrative and interactivity as visualization strategies on recall and comprehension.
- Designed a survey using principles of learning theory to test interpretation of visualization, and analysed the results using a bayesian mixed-effects model.

### Elevate - Ensuring access to food for food-insecure populations

UX Research | Finalist, CHI SDC 2017 Nov 2016 - Jan 2017

- Created interview protocol and conducted 13 user interviews to assess the needs, motivation, and problems faced by food-insecure population.
- Analysed findings into actionable insights. Conceptualised an accessible solution to provide access to information for places which serve free food.

### PHEME - Designing an alternate paradigm for news consumption

UX Research, UX Design Jan - Apr 2017

- Created research design to understand daily news consumption behavior of college students. Conducted week long photo diary study with 6 participants.
- Analysed findings and identified design guidelines for a concept mobile-based app based on research findings.

## About Me

I am a UX researcher with strong qualitative and quantitative skills, and knowledge of statistics. I am passionate about using data-driven methods for understanding user behavior and creating better user experience.

## Skills

### Qualitative

Contextual Inquiry  
Usability Studies  
Affinity Analysis  
Photo / Diary Studies  
Heuristic Evaluation  
User Journeys  
Personas  
Card Sorting  
Wireframing  
Design & Prototyping

### Quantitative

Survey Design & Analysis  
Bayesian Data Analysis  
Data Manipulation  
Data Visualization  
Predictive Modeling  
Machine Learning  
NLP

### Tools

Python, Pandas, Seaborn  
R, dplyr, rstan, ggplot2  
SQL  
JavaScript, D3.js  
Spark, Hadoop  
scikit-learn  
Keras