Samuel Goree

sgoree@iu.edu • samgoree.github.io • 646-734-0236
217 East 1st St. Unit 1
Bloomington, IN 47401

Education

2018 – 2023 (expected)
Indiana University – Blomington, IN
PhD in Informatics, Intelligent and Interactive Systems track
Minor in Digital Humanities. Advisor: David Crandall

2013 – 2017
Oberlin College – Oberlin, OH
BA in Computer Science and Musical Studies
Graduated with High Honors in Computer Science *GPA: 3.8.*

Honors and scholarships

2020 – 2023
NSF Graduate Research Fellowship
The NSF GRFP recognizes and supports outstanding graduate students in NSF-supported STEM disciplines who are pursuing research-based master's and doctoral degrees at accredited US institutions.

Peer-Reviewed Publications

2021
What Does it Take to Cross the Aesthetic Gap? The Development of Image Aesthetic Quality Assessment in Computer Vision.
Goree, S.
International Conference on Computational Creativity (ICCC) 2021.

2021
HyperNP: Interactive Visual Exploration of Multidimensional Projection Hyperparameters
Appleby, G. , Espadoto, M. , Chen, R. ,**Goree, S.** Telea, A., Anderson, E., Chang, R.
ACM CHI Conference on Human Factors in Computing Systems (CHI) 2021.

2021
Investigating the Homogenization of Web Design: A Mixed-Methods Approach.
Goree, S. Doosti, B., Crandall, D., Su, N.
ACM CHI Conference on Human Factors in Computing Systems (CHI) 2021.

2020
Studying Empirical Color Harmony in Design
Goree, S., Crandall, D.
Third Workshop on Computer Vision for Fashion, Art and Design at CVPR 2020.

2018 **Pain Town, an Agent-Based Model of Opioid Use Trajectories in a Small Community.**
Bobashev, G., **Goree, S.** Frank, J, Zule, W.
Social, Cultural, and Behavioral Modeling (eds Thomson, R. et al.) 2018

Other Publications

2020 **Yes, Websites Really are Starting to Look More Similar**
Goree, S. Doosti, B., Crandall, D., Su, N.
The Conversation

2021 **The Limits of Colorization of Historical Images by AI**
Goree, S.
Hyperallergic.com

Work Experience

2017 – 2018 **Data Scientist**
RTI International. Durham, NC.
Applied expertise in machine learning, advanced analytics, statistical modeling and web development to a variety of social science-motivated projects at a large research nonprofit.

2016 **Undergraduate Researcher**
Mentors: Robert Keller (Harvey Mudd College Summer REU).
Developed deep learning backend for jazz improvisation software ImproVisor with recurrent generative adversarial networks.

2015 **Undergraduate Researcher**
Mentors: Larry Medsker (Siena College Summer REU).
Implemented information extraction and text clustering techniques to analyze a corpus of letters to the New York State EPA.

Teaching experience

Fall 2018, Spring 2019, Fall 2019, Spring 2020 **Associate Instructor, INFO I-210: Information Infrastructure 1**
Teaching assistant, lab instructor and grader for a first course in programming for Informatics undergraduate students at Indiana University.

Fall 2015, Spring 2016, Fall 2016, Spring 2017 — **TA/Grader**
Served as a TA and Grader for a variety of undergraduate courses at Oberlin College including CSCI 275: Programming Abstractions, CSCI 280: Algorithms , CSCI 383: Theory of Computer Science

Presentations

September 2021 — Confronting Subjectivity in Computer Vision for Art and Design History.
ICCC Doctoral Consortium

May 2021 — Investigating the Homogenization of Web Design: A Mixed-Methods Approach.
Visualization Lab, Tufts University

June 2020 — Why Do All Websites Look the Same Now?
Emperor Design All Hands Meeting

June 2019 — Musical Interfaces, Metaphors and Online MIDI Keyboards.
Midwest Music and Audio Day

Theses

2017 — Towards a Relative-Pitch Neural Network System for Chorale Composition and Harmonization.
Computer Science Honors Thesis, Oberlin College.

2017 — Structure and Randomness in Iannis Xenakis' *Analogique A. Musical Studies Capstone Thesis, Oberlin College*

Service

2018-Present — **Member** Graduate Informatics Student Association

Peer Review ISMIR, ICLR, CHI, DIS, Leonardo.

Technical skills

Programming languages
Proficient in: Python, R, Java, C#, HTML/CSS, Javascript
Familiar with: C, C++, SQL, Lisp, Scheme, NetLogo

Other Tools
Deep learning using PyTorch, Theano, TensorFlow; LaTeX, Git, Docker, React

Other Skills

Ethnographic grounded theory, discourse analysis, historical webpage restoration