



Dissertation Defense

Doctor of Philosophy in Information Culture and Data Stewardship

“Between Text and Language: Unicode and the Rise of Emojis” by S.E. Hackney

Date: December 14, 2021
Time: 2:00 – 4:00 PM
Place: https://pitt.co1.qualtrics.com/jfe/form/SV_5w15fwKYFSuT8Gy

Committee:

- Dr. Alison Langmead, Associate Professor, School of Computing and Information
- Dr. Nora Mattern, Teaching Assistant Professor, Information Culture and Data Stewardship, School of Computing and Information
- Dr. Martin Weiss, Professor, Department of Informatics and Networked Systems, School of Computing and Information
- Dr. Annette Vee, Associate Professor, Department of English, Dietrich School of Arts & Sciences

Abstract:

The Unicode Standard is the de facto universal standard for character-encoding in nearly all modern computing systems. It is what ensures that the order and appearance of characters within digital documents remains consistent across time, operating system, and software. Unicode was developed during the late 1980s as a replacement for previous-generation encoding standards such as ASCII and EBCDIC, which limited the number of possible unique characters to no more than 256. As personal and business computing expanded worldwide and the nascent public internet was looming on the horizon, these 256-character slots were proving to be far too small for the orthographies of all human languages. This dissertation is a Faceted Methods Analysis (FMA) of the character-encoding standard Unicode, and its governing Consortium. FMA is a methodology developed by the author for the research and analysis of infrastructural systems, such as the Unicode Standard, wherein the subject matter is examined from a variety of intellectual approaches, each designed to be particularly appropriate for the part (facet) of the whole system at hand. Using the unique semantic nature of emojis as a focal point, this work examines how and why Unicode organizes itself, why its members participate in that governance, and how the work of Unicode is presented to the public.