Thesis Project Portfolio

Website Maintenance: Managing and Implementing User Requests

(Technical Report)

The Relationship Between User-Developer Communication and Software Bias

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science

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In Fulfillment of the Requirements for the Degree

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Sociotechnical Synthesis

The thesis discusses the process of requirements elicitation and requirements engineering in the software development cycle. Since maintenance and future changes to software can make up almost 90% of the total software cost, improving the process of communicating with users in order to understand the desired product is imperative to developing an effective, useful software product. The technical paper focuses on an internship experience with Dominion Energy which lacked an official system for collecting and implementing user feedback. The paper suggests a system for collecting and implementing user feedback at Dominion Energy in order to improve user satisfaction with the software product. The STS paper is highly related to the topics discussed in the technical paper. The STS paper examines how bias is introduced into a software product through requirements engineering and the collection of user feedback. Since biased software only satisfies the needs of certain users or groups, then the software only partially fulfills its intended purpose. Both papers are concerned with user-developer communication and the effects of this communication on software development.