To: Travis Margoni, Professor of WRTG 3015

From: Team 1 of WRTG 3015 (Greg Anderson, Jackson Murphy, Meher Samineni)

Date: October 29th, 2014

Subject: A new interdisciplinary journal that combines CS and the humanities

The purpose of this memo is to introduce a disciplinary dialogue of the intersection between Computer Science (CS) and the humanities. Specifically, we’re proposing to create a new academic journal. As CS students at the University of Utah, we see a need for an interdisciplinary journal that examines the connections between Computer Science and the humanities. Such a journal would help engage our Utah community in the humanities by facilitating discourse on current issues of technology’s impact on our lives. The impetus for this journal came after we conducted a survey of interdisciplinary CS scholarship. We found that CS developments were mostly being applied to other technical fields such as Engineering, Physics, and Biology. The articles in these publications mainly focused on original research, and were geared towards technical specialists, not the curious layperson. Overall, there seemed to be a lack of literature exploring the intersection of CS and the humanities. In the following passages, we describe three potential sections for this journal, each of which focuses on CS’s implications for a particular humanities subject.

**Ethical and Philosophical Issues in Computer Science**

Exploring the ethical and philosophical issues brought about by advances in Computer Science would be a compelling section for this journal. Today, largely due to Computer Science breakthroughs, we humans interact with and depend on technology more than at any other point in our history. This has given us convenience and many, many benefits. But it’s important that we discuss the ethical implications that come from using and developing technology, and also discuss how technology is changing our views on life and our place in the universe. Here are just a few examples of valuable discussion topics:

* How should companies like Google and Facebook ethically handle their users’ data?
* What restrictions, if any, should be placed on Artificial Intelligence (AI) research?
* How does digital communication enhance or degrade interpersonal relationships?
* How much, and by what means, should governments collect data on its citizens to prevent acts of terror and other crimes?
* What are the issues surrounding singularity and immortality? Should we pursue it without restraint?

I envision these topics, and many more like them, being debated primarily in the form of opinion articles and comics. I’ve chosen these genres because I believe them to be the most accessible to the layperson. It’s imperative that this journal engages as many people in the Utah community as possible, because these ethical and philosophical issues relate to all of us. As it stands, most people in Utah do not read academic journals. Journals are often esoteric. And they tend to have a style much different from the popular literature that most folks are familiar with. Together, these qualities make journals uninteresting and/or inaccessible to the layperson. By soliciting and featuring mainly opinion pieces and comics (similar to the wildly popular webcomic [xkcd.com](http://xkcd.com/)), the non-technical members of our community are more likely to read the journal, and also to contribute to it.

**Intersectionality of Jurisprudence and Computer Science**

In order to accommodate the rapid rise of computer technology, the legal system must work to incorporate technology’s new impact on society. With the era of the Internet, constant threats are faced by consumers as well as the law enforcement working to solidify which legal entity is responsible to enforce these rules. However, before that step can be reached, the boundaries of the legalities of Computer Science need to be defined in terms of intellectual property, cyber-identity, and cyber-crimes. Within each of those categories, sub-categories arise including what constitutes cyber-crime and who owns an identity online.

Another interesting intersection between Computer Science and jurisprudence is how enforcement will be approached while respecting the constitutional rights of citizens. For example, could a law enforcement agency such as the NSA track the websites and track users online only to be used in court at a later time? Questions like these are not only relevant, but important for the average computer user to understand. The decisions made regarding the effects of Computer Science cyber-security field and jurisprudence will determine how freely future generations will be able to use technology without regulation.

This journal proposes to explore the future effects that the field of Computer Science—specifically cyber-division—will have on future societies and communities. The articles portrayed in this journal will include past, current, and possible future case study scenarios. The scenarios will discuss the situation, involvement of legal entities, constitutional rules, and the effects that future communities will see. The articles will also present what current cyber-laws are, who enforces them, and what consumers need to know to protect themselves. We will bring experts from the community to explain the current impacts and future effects. Also, community members can submit opinion pieces that voice their support for, or opposition to, any relevant legal decisions.

**Computer Science and its Impact on Language/Linguistics**

During the initial stages of Computer Science development, memory in computers was limited, therefore language needs were small. Most programs did not have the capacity to support multiple languages. Companies that expanded globally faced the challenge of accommodating growing language demands with their new clients and employees. As a solution, computers developed support for characters from different languages. This became a vital development because, communities evolved to combine people from all over the world from every type of culture and language.

An example of how Computer Science has impacted language in our community is translation programs. Our community has become diverse, and we need to be able to communicate with each other. Computer Science has brought about innovative translation programs that help with the language barrier. Another example is when a company needs to add support for a new language in their program, they need somebody who can translate the current text into the new language. The person who translates does not need to be a programmer in order to accomplish this. People who are bilingual have been able to contribute in these ways.

An example of an article that could be written for our journal would be a study of how different companies have integrated support for other languages. It would be interesting to find out if those companies are more successful compared to other companies who do not have that support.

**Next Steps For This Journal**

In summary, we’ve described an interdisciplinary publication that would examine the connections between CS and three specific areas of the humanities—Philosophy/Ethics, Jurisprudence, and Language/Linguistics. (Perhaps the journal could be titled JELL+CS). It is our intention to further develop these ideas and then apply for a grant from the Utah Humanities Council in order to fund its publication. Mr. Margoni, we would be grateful for your feedback and assistance in helping us to refine our concept.