CS 6480: Class discussion summary
HA 7.b

José Monterroso

School of Computing, University of Utah

September 21, 2020

Discussion summary

- *Summary:* This was a very old paper from 1988, that at the time was published 15 years after the internet was commercialized. The author makes a bold claim that information about the internet is generally available but not well understood. I can agree with this because even in his own paper he didn't really provide much detail regarding the implementation aspect of the internet. We than transitioned into the meat of the paper. We discussed how DARPA's top level goal was to interconnect networks together. Section three of the paper provides us with a list of goals which were established for the internet architecture. If the seven goals were listed in any different order the internet would have been very different today. Lastly, during our discussion we noticed that security was not as important back then, and thus creates bigger problems for us today. This paper helped me realize that the process for the internet was not as crisp or elegant as I thought it was.

- *Strengths and weaknesses:* I can't really say for sure what the class consensus on this paper was. Not really much was said about the strengths or weaknesses of this paper during our class discussion. But on a personal note, I can say that the age of this paper comes into play. For example, at the time of this paper's release back in 1988, this paper was already roughly 15 years late from the development of the DARPA net. This in turn begs the question what is the use of this paper. This paper helps readers understand a little about why the internet was chosen to be the way it was and why it grew to become the way it is. But that's about it. Even though this paper was a conference paper I felt it was lacking content, especially when it came to architecture and implementation as well as TCP.

- *Connection with other work:* There really isn't any papers from our previous discussions that I can directly relate this paper to because we have started a new section on internet architectures. However, what I can say is that a lot of the things that are mentioned in this paper are the reasons why NFV and cloud computing were implement the way they are today.

- *Future work:* A few common things were mentioned. For example, this week we transitioned to learning about networking architectures, so it was brought up that we could look into or develop networking architectures. Ideally, these type of networks would have an emphasis on security and reliability. It was also mentioned that we could find/create better ways to make the internet more accountable. Lastly, future work for the author himself would be to expand on this paper and to dive a little deeper into the details of datagrams and TCP.

1