Two Undergraduate Researcher Positions available

Dr. Phani Vadrevu's lab in Computer Science department currently has openings for two paid undergraduate research worker positions. Please note that due to funding agency restrictions, these are open only to students who are US Citizens or US Permanent Residents. These positions support 44 weeks of stipend at \$15 per hour (10 hours/week). The two selected undergraduate research workers get an opportunity to work on a novel research project and present their findings at an international research conference. Support for partial or complete conference travel will also likely be available for this upon acceptance of the work at the conference. The selected students will be working on two different research projects which will briefly be described below:

Combating Telephony Scams:

The student will be required to work on a project that focuses on studying telephony scam attacks that are initiated via search engines and e-mails. The project aims to shed light on the evasive nature of these scams which can help bring more attention to this serious problem. The project will also help collect valuable ground truth data which can help researchers to develop defensive solutions in the future. Some relevant research papers that provide a background are below.

"<u>Dial One for Scam: A Large-Scale Analysis of Technical Support Scams</u>", NDSS 2017 "<u>Exposing search and advertisement abuse tactics and infrastructure of technical support</u> <u>scammers</u>", WWW 2018

Security Issues in Web Accessibility Systems and Features:

The student will first be required to gain familiarity with the functioning of web accessibility systems, particularly for visually challenged users. Next, the goal is to find potential issues in such systems that might be exacerbating security problems and study them. The ultimate objective is to make impactful research contributions towards improving security features of web accessibility systems. Some relevant research papers that provide a background are below.

"<u>I'm Stuck!: A Contextual Inquiry of People with Visual Impairments in Authentication</u>", SOUPS 2015 "Time Does Not Heal All Wounds: A Longitudinal Analysis of Security-Mechanism Support in

"<u>Time Does Not Heal All Wounds: A Longitudinal Analysis of Security-Mechanism Support in</u> <u>Mobile Browsers</u>", NDSS 2019

Requirements:

We are looking for highly motivated students with strong CS programming skills who are passionate about doing web security research. There is no hard GPA cut-off. If you are interested in one (or both) these positions, please apply by sending an email to: <u>phani@cs.uno.edu</u>. With your e-mail, please include the following:

(1) Your CV (with a link to a public code repository, if any).

(2) A brief "research ideas" document detailing how you think we can approach either/both the above projects (maximum of one page).

If you have further questions before you apply, please do not hesitate to reach out to Phani at the e-mail address above.

<u>Please include the exact phrase "UG-Research-22" in the subject line in all your e-mail correspondence.</u>

A digital version of the ad is available here:

