

May - August 2015 Outreachy Internship Application

Name: Kinga Farkas

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Web Page / Blog / Microblog (e.g. Twitter) / Portfolio: www.nthturn.com

Location: Portland, Oregon

Education completed or in progress (include university, major/concentration, degree level, and graduation year):

Masters in Mathematics, Oregon State University, 2000

How did you hear about this program?

A fellow pylady told me about this program.

Are you applying for Google Summer of Code and, if so, with what organization(s)?

I am not applying for the Google Summer of Code.

Please describe your experience with the organization's product as a user and as a contributor (include the information, as well as a link or an attachment, for the required contribution you made to the project you are interested in here):

I am interested in an internship with the M-Lab team. My initial project involved answering the question: "Did the social unrest in Egypt in January - February, 2011 coincide with significant increase

in RTT, indicating TCP congestion?" The write-up of this project and the project itself can be found on github, at <https://github.com/lilbludot/OutreachyProject> . I am also attaching a pdf file of my project write-up. However, if this initial project is approved I plan on working and I plan on adding to it.

Please describe your experience with any other FOSS projects as a user and as a contributor:

N/A

Please describe any relevant projects that you have worked on previously and what knowledge you gained from working on them (include links):

I am the co-organizer of the Portland Data Science Meetup Group and I have been organizing bi-weekly Kaggle workshop meetups. As part of these meetings I have been working on various Kaggle competition problems. I have posted some of the material from the talks I have given at these workshops on my blog: www.nthturn.com, and much of the code I have written can be found on github: <https://github.com/lilbludot>

What project(s) are you interested in (these can be in the same or different organizations)?

I am interested in either the "Assess performance impact of major regulatory changes" or the "Data signal searching" project with the M-Lab team.

Who is a possible mentor for the project you are most interested in?

Steph Alacron

Please describe the details and the timeline of the work you plan to accomplish on the project you are most interested in (discuss these first with the mentor of the project):

I would like to look for correlation between social unrest that is being organized via social media and significant increase in RTT.

I would begin by choosing several incidences of social unrest, for example the Arab Spring in Egypt, Tunisia, Bahrain and the recent protests in Hong Kong. In each case I would create a daily, weekly and monthly time series of the mean RTT's from the months preceding the incidents in question. I would then use those time series to forecast RTT's for the time intervals during which the social unrest took

place and I would compare those with the actual RTT's. A significant difference between the actual and predicted values would mean that there was an external factor that altered the "regular" process.

Project Timeline: I would spend three weeks on each of the following events: Arab Spring in Egypt, Arab Spring in Tunisia, Arab Spring in Bahrain and the 2014 Hong Kong protests. During each three week period I would acquire the relevant data, perform the analysis and write up my findings. I would use the last few days of the internship to summarize and compare the results of each of the three week periods.

Will you have any other time commitments, such as school work, another job, planned vacation, etc., between May 25 and August 25, 2015? How many hours a week do these commitments take?

I do not have any time commitments in the time period between May 25 and August 25, 2015.

If a student, please list the courses you will be taking between May 25 and August 25, 2015, how many credits you will be taking, and how many credits a full-time student normally takes at your school:

I am not enrolled in school.