Clarkson

Department of Biology

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Date: February 02, 2020

Dr. Laura Grabowski
Associate Professor and Chair
Department of Computer Science
SUNY Potsdam

Dear Prof. Grabowski,

It is with great enthusiasm I am writing this letter in strongest support of Dr. Supraja Gurajala for her reappointment as a faculty at the Computer Science Department, SUNY Potsdam. I am an Associate Professor of Biology at Clarkson University and working with Supraja on a multidisciplinary project for over a year.

My first scholarly interaction with Supraja started in August 2018, when she agreed to deliver an invited talk at a mini-conference on data science we were organizing at Clarkson. Not only her talk titled “Can we build accurate spatio-temporal event models with social media data?” was well received in the conference, but it also initiated a very productive multidisciplinary collaboration.

Supraja’s expertise and experience in conducting data-driven research and her willingness to join a multidisciplinary research work has led us to initiate a project on air quality prediction from land-use data. Apart from Supraja, this team consists of Dr. Suresh Dhaniyala, Department of Mechanical Engineering at Clarkson University and Dr. Sumona Mondal, Department of Mathematics at Clarkson University. Supraja’s expertise and mentoring skills helped to kick-start our project as she helped the students from downloading the data from the online repositories to write python code for analysis. As a result, we could present some of our initial findings in the Annual Spring Research and Project Showcase (RAPS) at Clarkson University and in the 13th Probability and Statistics Day at UMBC, Baltimore, both held in April 2019.

We maintained a steady progress in our project during the fall of 2019 and the spring of 2020. During this time we decided to dive into an ambitious direction: We decided to analyze Array of Things (AoT) low-cost sensor network-derived air quality data and combine this to land-use regression (LUR) model to predict air quality at high spatio-temproal resolution. While this is very novel research, and we are still at the exploratory stage, Supraja played an instrumental role to overcome some of the critical initial hurdles. With her expertise in the server systems, we have been able to install successfully a powerful server to store a large amount of data and perform heavy computational tasks.

She is currently leading the research team in designing and installing a MongoDB database in this newly installed server.

The students in our air quality prediction research team (currently consisting of two Ph.D. graduate students, one masters, and one undergraduate student) are highly benefited from Supraja's mentoring and advice. Her natural skill of teaching was also evident last fall in the "Clarkson – SRIHR-ICMR Indo-US Training Workshop on Low-Cost Air Quality Sensors and Related Data Analytics" workshop where she played an instrumental role as an instructor to teach Python-based techniques for air quality analysis.

I find tremendous potential in Supraja to succeed in both research and teaching. Such a combination of qualities is not commonly found, and when present, I believe is a treasure to the Department and the University. I will put forward my solemn support in favor of her reappointment as a faculty at the Computer Science Department, SUNY Potsdam.

Sincerely yours,

Shantanu Sur

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