



The Math/Stats Colloquium
Department of Mathematics and Statistics
San José State University



Tahir Bachar Issa

SJSU

*Toward an Automated Radiology
Exam Protocol Selection*

Nov 10, 2021, VIA ZOOM

Abstract: One of the more administratively intensive tasks that pulls the physician away from patient facing work is the daily exercise of matching the scheduled exams with specified protocol for each exam. In this talk, I will present our work on building and deploying an efficient and accurate machine learning system for protocoling the top 50 most common protocols from Georgetown University Hospital. The multi-step deep learning model achieves a weighted average top one recall of 90% and precision of 90% across the 50 protocols. When deployed at the hospital, the model achieves a top one accuracy of 76% and top two accuracy of 87%.

Background: No particular background required.

About the speaker: Tahir Issa earned his PhD in Mathematics at Auburn University in 2019. He worked as a Data Science Postdoctoral Fellow at The Data Institute, University of San Francisco, CA (2019-2021) and is currently an Assistant Professor in Data Science at SJSU in the department of mathematics and statistics.

COLLOQUIUM BROADCAST VIA ZOOM, 4:15PM PACIFIC

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For our full schedule, see: <http://www.timhsu.net/colloq/>