Título: **An Approach for Discovering Probable Movement Patterns and Behaviors of People through Visual Analysis of Predictive Suffix Trees**

Data: **09/08/2019**

Horário: **10:00h**

Local: **Sala de Seminários - Bloco 952**

Resumo:

Predictive Suffix Trees (PSTs) are data structures capable of simultaneously represent space, time, and probability used to predict when a person would leave her current position to move to a new probable location. Although they are usually complex to read, they can help crime investigation; management road traffic; or location-based advertising, for example. This work proposes the application of visual analytics to simplify the task of finding movement patterns and possible behaviors of a person, through the use of data stored in PSTs. For that, we introduce an approach that applies sensemaking and branching time to provide a less abstract character to PSTs, allowing analysts to explore the dynamics of space-time combinations (space, time and space versus time relations) considering probabilities. To validate the proposed solution, we developed a visualization tool and performed two distinct user studies, with a total of 77 participants and two different datasets. The obtained results demonstrated the feasibility of applying the solution, allowing analysts to solve initial problems, but letting they

propose their own questions to find other answers to the problem.

Banca:

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