Gaussian Processes to Study the Joint Dynamics of Networks and Time Series

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***Abstract*—[TODO]**

***Index Terms*—Gaussian Process, Point Process, Hawkes Process, Network Evolution, Information Diffusion**

I. Introduction

THIS is [TODO]

A. Gaussian Processes

This write-up serves two purposes. First, it forms the basis for your candidacy exam. As such you should summarize the three papers selected by your advisor and yourself, and analyze as well as discuss them critically. Second, the write-up is also your thesis proposal. Therefore, the last one or two pages should be dedicated to your own preliminary work. A road-map of how you plan to advance the state of the art in your chosen area should also be given. For further details please consult the document "PhD Candidacy Exam Overview." You can find the latest version at `http://phd.epfl.ch/page57746-en.html`.

B. What to Put into the Introduction

Describe briefly the context, the problem, shortcomings in prior approaches, and your proposed approach and solution. Forecast results.

II. Recurrent Gaussian Processes

III. Log-Gaussian Cox Processes

IV. COEVOLVE: A Joint Process Model for Information Diffusion and Network Co-evolution

References

[1] F. Mittelbach, M. Goossens, J. Braams, D. Carlisle, and C. Rowley, *The LaTeX* Companion, 2nd ed. Addison-Wesley Professional, 2004.