PROMOTION RECOMMENDATION
The University of Michigan
Stephen M. Ross School of Business

Stefanus Jasin, assistant professor of technology and operations, Stephen M. Ross School of Business, is recommended for promotion to associate professor of technology and operations, with tenure, Stephen M. Ross School of Business.

Academic Degrees

Ph.D.   2011   Stanford University, Computational Mathematics and Engineering
M.S.   2011   Stanford University, Statistics
B.A.   2005   University of California at Berkeley, Mathematics

Professional Record:

2011 – Present   Assistant Professor of Technology and Operations, University of Michigan, Stephen M. Ross School of Business, Ann Arbor, MI

Summary of Evaluation:

Teaching: Professor Jasin has reached a high level of teaching effectiveness. He has taught B.B.A., M.B.A., and Ph.D. classes. His performance in the core B.B.A. statistics class has been superb, ranging from 4.65-4.92 in each individual section. After two years, Professor Jasin transitioned into the role of core course coordinator, where he mentored other faculty members. Given his strong performance in TO301, we also asked him to teach an MBA elective, TO621, Logistics. He has been teaching it since 2016 with evaluations of 4.62-4.65. Professor Jasin also taught a doctoral course on Revenue Management (TO 899) and supervised numerous MAP and Tauber (engaged, action-based learning) projects. In advising these projects, he seamlessly combines research insights with his pedagogical and coaching roles.

Research: Professor Jasin has engaged with a wide range of Ross and technology and operations colleagues and generated a long list of publications and work in progress. Professor Jasin's focus is on developing provably near-optimal heuristics or showing that existing heuristics are near optimal. His most visible research to date is in the area of revenue management, but some of the work also about omni-channel retail and e-commerce, among others.

Many of Professor Jasin's papers deal with fundamental issues. Professor Jasin analyzes a fairly wide range of problems. Often his follow-on papers deepen and refine the findings of the previous ones. For example, the paper "A Re-Solving Heuristic with Bounded Revenue Loss …" published in *Mathematics of Operations Research* deals with a broad range of revenue management problems in the very specific context of exogenous prices, given (or fixed) resources, and homogeneous customers. The paper looks at a very specific allocation problem -- a product that requires combining a bundle of resources. This problem is typically formulated as a Dynamic Program (which commonly suffer from tractability challenges). Professor Jasin, however, uses a simple, but arguably popular class of heuristics where one replaces uncertain variables with their expected values. The paper shows that one then can formulate the problem as a Linear Program, which is easy to solve, and re-compute as needed. This establishes the framework common to many of Professor Jasin's papers – analysis of simple solutions applied to complicated problems. Professor Jasin then builds on his earlier results to solve increasingly complex situations. His working papers include challenging combinations such as a firm that needs to decide which assortment of products to offer, the pricing of these products, and the fulfillment strategy for the case where the firm sells both on

line and in regular stores. Many of Professor Jasin's recent investigations also extend to new areas, including logistics, order fulfillment, as well as healthcare and relationship management.

Professor Jasin's research output is impressive. He has developed a coherent body of work that deals with algorithmic approaches to very large-scale problems, but which also builds a theoretical foundation that informs our understanding of the performance of several classes of heuristics. The recent growth in availability of massive data and the desire to automate decisions provide a fertile ground for Professor Jasin's research. Professor Jasin's pipeline is solid, with seven papers in preparation, and a long list of other works-in-progress. Many of these papers are written with Ross, as well as non-Ross, faculty and students. Thus, in addition to a coherent research stream, Professor Jasin has been building and extending his set of collaborators.

Recent and Significant Publications:

Hyun Soo Ahn, Stefanus Jasin, Philip Kaminsky, Yang Wang. 2017. Analysis of Deterministic Control and Its Improvements for an Inventory Problem with Multi-Product Batch Differentiation. *Accepted at Operations Research.*

Yanzhe Lei, Stefanus Jasin, Amitabh Sinha. 2017. Joint Dynamic Pricing and Order Fulfillment for E-commerce Retailers. *Accepted at Manufacturing and Service Operations Management.*

Qi Chen, Stefanus Jasin, Izak Duenyas. 2016. Real-time Dynamic Pricing with Minimal and Flexible Price Adjustments. *Management Science*, 62 (8): 2437-2455.

Stefanus Jasin, Amitabh Sinha. 2015. An LP-Based Correlated Rounding Scheme for Multi-Item E-commerce Order Fulfillment. *Operations Research*, 63 (6): 1336-1351.

Stefanus Jasin, Sunil Kumar. 2012. A Re-solving Heuristic with Bounded Revenue Loss for Network Revenue Management with Customer Choice. *Mathematics of Operations Research,* 37 (2): 313-345.

Service: Professor Jasin's professional service has been good. He was asked to review multiple papers for the top Operations journals (*Management Science*, *Operations Research*, *Manufacturing and Service Operations Management*, *Mathematics of Operations Research*, *POMS*, and *EJOR*). This year he was also nominated as a judge in a student paper competition.

Internally, Professor Jasin has provided very good service to our area. He is very active in faculty recruitment activities. He also was involved in multiple activities related to the recruitment of doctoral students. Last semester, he served as our Ph.D. coordinator. He was also very effective as a core course coordinator and as a coordinator of our area's research seminars. In addition to formal roles, Professor Jasin is willing to help when needed, and is comfortable playing new roles. His service contributions are clearly in line with what one might expect from an assistant professor.

External Reviewers:

Reviewer A: "[Professor Jasin] has been quite productive and has a good publication record. … His work in the area of revenue management provides new and interesting insights,… He has a strong pipeline that should convert in due course,… It is clear that he meets the bar for tenure."

Reviewer B: "I find each of his papers to contain key insights that have changed the way I view such problems,… Each introduces a new perspective that may have been subtle or simple (ex post) but that yields both a powerful theoretical advantage and a practical improvement over previous work,… I view these results as both theoretically thought-provoking and highly relevant for practice,"

Reviewer C: "On a quantifiable level, Professor Jasin has an impressive set of eight 'A' publications, along with a healthy pipeline of work,… He's published interesting and demanding work with his thesis advisor,

on his own, and with his colleagues at Ross,… A large group of high quality papers,… Sustained and thoughtful pursuit of an important class of problem that's reflective of a strong researcher."

Reviewer D: "Professor Jasin's record is good,… The latter [seven paper in progress] is very impressive and shows great promise for future,… This paper was the first one to establish why this [deterministic approximation] was performing so well,… Professor Jasin is a good presenter,… I support his promotion."

Reviewer E: "Professor Jasin has made important contributions especially in the area of revenue management focusing on both quantity based and price based decision-making processes,… This is a beautiful piece of research that represents a departure from the traditional research in this area,… One of the best [junior] faculty in the field,… I enthusiastically recommend Dr. Jasin for promotion."

Reviewer F: "Stefanus has made some major contributions to the field of revenue management and pricing analytics…, Stefanus should be promoted with tenure."

Reviewer G: "While the basic methodology has been developed by others, mostly, Jasin is able to synthetize these ideas and further develop the methodology in artful ways, and to apply it to a variety of new applications,… He published in the very best journals and has plenty in the pipeline. … I fully support his promotion."

Summary of Recommendation: Professor Jasin's quantity and quality of research easily meets the expectations for tenure at a top business school. He is perceived as one of the top researchers in the area of revenue management. He is a strong and dedicated teacher, has provided a good level of service to the research community consistent with his rank, and has demonstrated ability for and commitment to service to Ross and to the University of Michigan. The technology and operations area and the executive committee unanimously recommend promoting Professor Jasin. It is with their support that I recommend Stefanus Jasin for promotion to associate professor of technology and operations, with tenure, Stephen M. Ross School of Business.

_____
D. Scott DeRue
Edward J. Frey Dean of Business
Stephen M. Ross School of Business

May 2018