

Approved by the
Regents
May 21, 2015

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

Hyun-Soo Ahn, associate professor of technology and operations, with tenure, Stephen M. Ross School of Business, is recommended for promotion to professor of technology and operations, with tenure, Stephen M. Ross School of Business.

Academic Degrees

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| Ph.D. | 2001 | University of Michigan, Industrial and Operations Engineering, College of Engineering, Ann Arbor, MI |
| B.S. | 1993 | Korea Advanced Institute of Science and Technology, Korea |

Professional Record:

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| 2009-Present | Associate Professor of Technology and Operations, University of Michigan, Stephen M. Ross School of Business, Ann Arbor, MI |
| 2003-2009 | Assistant Professor of Technology and Operations, , University of Michigan, Stephen M. Ross School of Business, Ann Arbor, MI |
| 2001-2003 | Assistant Professor of Industrial Engineering and Operations Research, University of California, Berkeley, CA |
| 1998 | System Analyst, Intel Corporation |

Summary of Evaluation:

Teaching: Professor Ahn's teaching is spectacular. He has taught BBA, MBA, Global MBA, Executive MBA, and Ph.D. levels and more than half of his recent (last three years) evaluations are 5/5. He is also a recipient of five Teaching Excellence awards. Together with Amitabh Sinha, he redesigned multiple versions of Statistics classes. With Roman Kapuscinski, he designed the Business Analytics elective, which now attracts two sections of MBAs. He has written cases for his classes and experimented with new versions of teaching methods. His performance as an advisor of Tauber Institute projects is superb as well. He was listed by BusinessWeek (2007) as one of the top business school professors ("Best in Class").

Research: Professor Ahn came to our area from the Industrial Engineering department at Berkeley. At that time, as well as during the first few years after joining Ross School of Business, he worked in the field of queuing systems with flexible as well as heterogeneous servers. His papers were published in top journals such as *Advances in Applied Probability*, *Journal of Applied Probability*, or *Queueing Systems*. The lessons from these papers are important, as understanding the dynamics allows for efficient design of such systems. Also, one can assess the benefits of new configurations, of flexibility, and of training or cross-training in specific situations. The papers in this area are very well executed. They are motivated by specific production (or service) environments, the execution is precise – it includes both provable properties, as well as effective (thoroughly tested) heuristics.

While we were impressed with Professor Ahn's early work on the evaluation and design of queueing systems, many senior faculty saw early on the potential in Professor Ahn to engage in broader business topics. Two previous department chairs communicated this opportunity to Professor Ahn during his pre-tenure years at Ross. To his credit, Professor Ahn wholeheartedly embraced this

advice. The transition was visible at the tenure time and continued after tenure. Professor Ahn's research publications after tenure remain strong and focus on a broad range of new issues. These include topics at the interface area of marketing and operations that deal with pricing, strategic customer behavior, the role of capacity, and the role of negotiation. Similarly, the topics in the area of supply chain design introduce a number of angles observed in practice but not sufficiently studied, such as capacity investment with explicit capture of demand learning, or new arrangements when different firms make an investment in a joint research facility.

We appreciate the challenges inherent in the transition that Professor Ahn has successfully navigated. He is publishing business-grounded research in top business journals at a pace that has only accelerated since tenure.

Recent and Significant Publications:

Man Yu, Hyun-soo Ahn, Roman Kapuscinski. 2014. Rationing Capacity in Advance to Signal Quality. Forthcoming in *Management Science*.

Chia-wei Kuo, Hyun-soo Ahn, Goker Aydin. 2011. Dynamic pricing of limited inventories when customers negotiate. *Operations Research*, 59, 882-897.

Jung-Hyun Kim, Hyun-soo Ahn, Rhonda Righter. 2011. Managing queues with Heterogeneous Servers. *Journal of Applied Probability*, 48(2) 435-452.

Hyun-soo Ahn , Mehmet Gumus, and Philip Kaminsky. 2007. Pricing and manufacturing decisions when demand is a function of prices in multiple periods. *Operations Research*, 55, 1039-1057.

Hyun-soo Ahn and R. Righter. 2006. Dynamic load balancing with flexible workers, *Advances in Applied Probability*, 38, 621-642.

Service: Professor Ahn has also served in multiple roles in the broader operations management community. This included organizing tracks and sessions at the operations management conferences, and serving as the invited cluster chair for the INFORMS conference. He has served on NSF panels and judged, as well as chaired, paper competitions. He has regularly performed editorial tasks, including serving as an ad hoc reviewer for many journals as well as serving as a member on the Editorial Review Board for *Production and Operations Management*. He is an associate editor and has served as a guest editor for *Probability in the Engineering and Informational Sciences*.

Within the Ross School of Business, Professor Ahn has served as a Ph.D. coordinator (2008-2011) and redesigned candidacy requirements at that time. Also, he sat on the Curriculum Committee and Grievance Board. He is always willing to help when needed, and is comfortable with the potential to play new roles.

External Reviewers:

Reviewer A: "...Hyun-Soo is a great researcher and has contributed to a variety of topics over his academic career... He has a good pipe-line of research underway. Also, he is an outstanding teacher and has contributed sufficiently to the field through his service. Based on this, I believe that Hyun-Soo will be promoted to full professor at most business schools and thus recommend his promotion to full professor at Ross School."

Reviewer B: “Professor Ahn impressed me immediately as a graduate student with his exceptional technical capabilities. He continues to impress me with his research contributions and career development to date. He is also...an outstanding teacher... As I wrote for his tenure case, I expected his energy level and creativity to have continued to lead him to new results and insights. I am glad to see that he has done just that and fully anticipate his record of productivity to continue for many years to come.”

Reviewer C: “Aggregating the different dimensions of contributions – quantity, quality, creativity, and versatility – into a final recommendation, I have reached the conclusion that Professor Ahn well deserves to be promoted to Full Professor with tenure.”

Reviewer D: “I think Hyun-Soo continues to produce interesting, high quality research, and I believe that he is surely an asset to the Ross School. I enthusiastically recommend his promotion to Professor. At..., Hyun-Soo’s work as a Ph.D. coordinator, training Ph.D. students, as a member of school and university committees, and as an exceptional classroom instructor would also take on positive weight as we judge his intellectual contribution to the school. I think that on this basis it’s quite likely that Hyun-Soo would be promoted to Professor at... I know that, personally, I would be happy to have Hyun-Soo as a colleague.”

Reviewer E: “I am quite favorably impressed with the body of work. He clearly brings substantial strengths...as is evident throughout his papers. He is quite productive, and is publishing in top journals. Indeed, his productivity seems to have jumped post tenure. The number of doctoral students and their placement is also very noteworthy. In summary, Professor Ahn has a very impressive post-tenure record and continues as a productive and influential scholar. He seems deserving of promotion to the rank of Full Professor at a top tier business school.”

Summary of Recommendation:

Professor Ahn has published articles in a variety of journals with the quantity of research exceeding the average for tenured professors and with recognized quality as well. He is an outstanding teacher, and has provided significant service to the school and research community. With this in mind, I strongly recommend Hyun-Soo Ahn for promotion to professor of technology and operations, with tenure, Stephen M. Ross School of Business.



Alison Davis-Blake
Edward J. Frey Dean of Business
Stephen M. Ross School of Business

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