PROMOTION RECOMMENDATION The University of Michigan College of Literature, Science, and the Arts

Ji Zhu, assistant professor of statistics, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of statistics, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D. 2003

Stanford University

B.S.

1996

Peking University

Professional Record:

2003 - present

Assistant Professor, Department of Statistics, University of Michigan

Summary of Evaluation:

<u>Teaching</u> – Professor Zhu is an outstanding teacher and student evaluations are consistently high. He has been very effective as a supervisor of doctoral students and has been active in mentoring undergraduate students. He is generous with his time and is effective at managing students' progress so that they accumulate tangible signs of research productivity. Four of his students have won best paper awards. He has also been involved in course development and other educational initiatives.

Research – Professor Zhu's research interests are in the areas of modeling and analysis of high-dimensional data and machine learning. His work is at the forefront of new developments in statistics and are of considerable interest. His publication record is notable for quality and quantity, with 23 papers published in or accepted by top journals. He has high visibility in the profession and has been very successful in obtaining research grants.

Recent and Significant Publications:

- "Piecewise linear regularized solution paths," with S. Rosset, *Annals of Statistics*, 35(3), 2007, pp. 1012-1030.
- "Quantile regression in reproducing kernel Hilbert spaces," with Y. Li and Y. Liu, *Journal of the American Statistical Association*, 102(477), 2007, pp. 255–268.
- "The doubly regularized support vector machine," with L. Wang and H. Zou, *Statistica Sinica*, (special issue on data mining and machine learning), 16(2), 2006, pp. 589–616.
- "Kernel logistic regression and the import vector machine," with T. Hastie, *Journal of Computational and Graphical Statistics*, 14(1), 2005, pp. 185–205.

<u>Service</u> – Professor Zhu has provided good support to the Department of Statistics on the Executive, Graduate Admissions, Curriculum, and other committees. He has been active professionally as a prolific referee and is associate editor of two journals. He has been invited to organize major conference sessions and has been an invited speaker at many conferences and colloquia.

External Reviews:

Reviewer (A)

"By all the criteria I can evaluate, Dr. Zhu is exceptional. He is doing excellent research, he has built a portfolio of application areas and productive collaborations, he is engaged with our professional societies, he supervises students, and he performs university service."

Reviewer (B)

"Ji Zhu is certainly an internationally recognized researcher in his area; I would rank him top class among [his cohort]... There aren't very many researchers who combine relevant algorithms and methods with mathematical formalism and rigor: Ji Zhu's research is a well-blended mix of both."

Reviewer (C)

"Dr. Zhu is a strong scholar and prolific researcher. He has a wide spectrum of interest. His research scope keeps steadily expanding... He has made many outstanding and insightful contributions... His work has also been recognized by various funding agencies."

Reviewer (D)

"I...think very highly of his contributions... Dr. Zhu is one of the most productive and innovative statisticians [of his cohort]... The novel methods developed by Dr. Zhu have found wide applications in many areas... The papers have clearly demonstrated that Dr. Zhu has become a mature and independent researcher and in fact one of the leading researchers..."

Reviewer (E)

"This promotion should surely be an easy decision for you. Ji's record would warrant promotion and tenure at any university in the world. You will do well to hold on to him in the coming years! ... He has been extraordinarily productive and is well funded. ... You are extremely fortunate to have Ji on your faculty."

Reviewer (F)

"This is a very strong promotion case, easily in the top quartile of cases I have seen..."

Reviewer (G)

"Dr. Zhu's record of high quality publications, four active grants as PI or co-PI, six doctoral students under his guidance, high professional visibility and substantive collaborations make a compelling case.....Zhu's research is among the best in his field, a field that is rapidly growing, attracting grant support... I commend his work as first-rate and believe he will be highly productive as an Associate Professor."

Reviewer (H)

"...Ji Zhu is one of the best (if not the very best) statisticians [of his generation] working in the area of machine learning. His papers are fine contributions of deep insights, powerful theories, and efficient algorithms. ... He is clearly an effective Ph.D. advisor, as evidenced by the fact that four of the papers he coauthored with his students won the best paper awards. He is also an effective collaborator on interdisciplinary research, as can be seen from the paper he coauthored on physics, neuroscience, genetics, and manufacturing."

Reviewer (I)

"...Ji is on a sure trajectory to become a leading statistician. He has the taste, the skills and desire to be successful and he could not have done better. I would like to give him my strongest support for promotion to Associate Professor with tenure."

Summary of Recommendation:

Professor Zhu is a leading researcher in his field. He is an outstanding teacher and mentor, and he has provided invaluable service to the Department of Statistics. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Ji Zhu be promoted to associate professor of statistics, with tenure, in the College of Literature, Science, and the Arts.

Terrence J. McDonald

Arthur F. Thurnau Professor, Professor of History, and Dean

College of Literature, Science, and the Arts

May 2008