

ACM MSWiM 2003

Proceedings of the Sixth ACM International Workshop on
**Modeling, Analysis and Simulation
of Wireless and Mobile Systems**



September 19, 2003 • San Diego, California, USA

Edited by

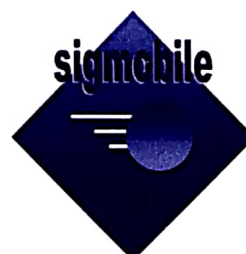
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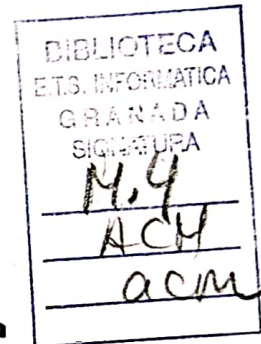
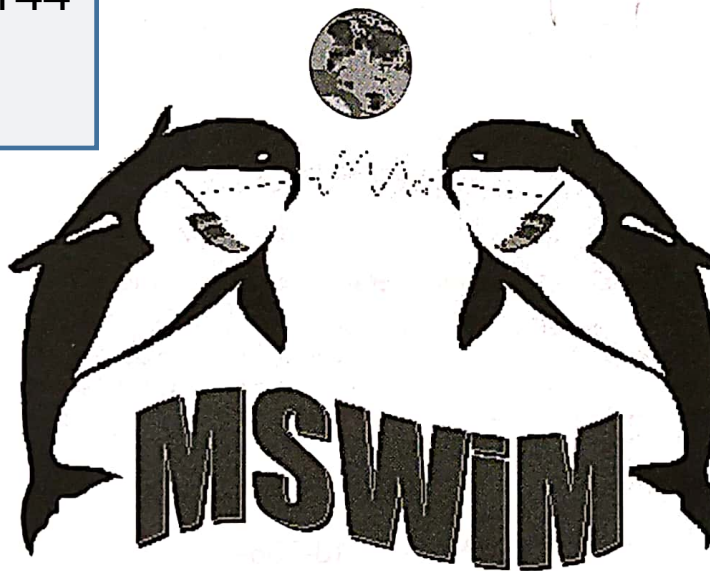


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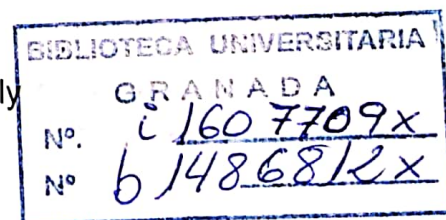
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Message from the General Chair

Welcome to the 6th ACM International Workshop on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM). MSWiM 2003 is being held jointly with the 9th Annual International Conference on Mobile Computing and Networking (MobiCom), in San Diego, California.

Modeling and analysis of complex wireless and mobile systems often requires good knowledge of the system being modeled. The co-location of MSWiM and MobiCom provides an excellent opportunity for the MSWiM participants to exchange views with experts in Mobile communication systems and extend their knowledge in this growing and important field.

It is well known that the success of a workshop such as MSWiM depends heavily on the scientific merit of the accepted papers and the discussion opportunities provided by the workshop. Many people worked very hard to make this workshop a success. The Program Co-Chairs Carla-Fabiana Chiasserini and Hossam Hassanein and the Publicity Co-Chairs Helen Karatza, Mirela Sechi Moretti Annoni Notare, and Luciano Bononi all did an outstanding job to solicit high quality papers. As a consequence, this year we received over 100 submissions, which is a 25% increase compared to MSWiM 2002. The Program Committee Members worked very hard to keep the deadline and to select the most suitable papers. The increased number of submissions to MSWiM 2003 is also an indication of the importance of modelling and simulation in the performance evaluation of wireless and mobile systems. I am convinced that the accepted papers represent an interesting view of the state of the art in the research activities in the field of wireless networks and mobile computing.

The Steering Committee Chair, Azzedine Boukerche, has worked very hard in the past few years to establish MSWiM as the main research forum for Modeling, Analysis and Simulation of Wireless and Mobile Systems. I believe that he and his colleagues have succeeded in establishing MSWiM and appreciate their efforts.

Our keynote speaker is Prof. Ramesh Rao from University of California, San Diego. Thanks to Prof. Rao for accepting our invitation to be the keynote speaker.

I would like to extend a sincere thank you to all who have helped to make MSWiM 2003 a success. In particular, I wish to thank the Program Co-Chairs, the Publicity Co-Chairs, the Webmasters, the Program Committee Members and the Referees who provided high quality reviews within a very tight schedule.

I wish to thank the workshop sponsor, the ACM SIGMOBILE, and the ACM SIGSIM, the IEEE Computer Society and the Politecnico di Torino for their support. Finally, thanks to the Speakers, Session Chairs and Audience for attending MSWiM 2003.

Rassul Ayani
General Chair, MSWiM 2003

Message from the Program Co-Chairs

On behalf of the Technical Program Committee, it is our pleasure to welcome you to the 6th ACM Int'l MSWiM 2003 Workshop. This year MSWiM is being held jointly with the 9th Annual International Conference on Mobile computing and Networking (MobiCom), in San Diego, California.

This year we received 100 paper submissions from 22 countries. After a very careful review process, 15 papers were accepted for regular presentation and 6 papers for poster presentation. The increased number of submissions that MSWiM is experiencing every year indicates the importance of modeling, analysis, and simulation in the performance evaluation of wireless and mobile systems, and indicates the maturity of the workshop.

We believe that the accepted papers provide an interesting and complete view of the state of the art in the research activities in the field of wireless networks and mobile computing, and we hope that the MSWiM proceedings will be a valuable reference to years to come.

The following three papers were selected as candidates for the *Best Paper Award*:

- W. Yuen, R. Yates, C. Sung "Effect of Node Mobility on Highway Mobile Infostation Networks"
- Z. Cheng, W. Heinzelman "Flooding Strategy for Target Discovery in Wireless Networks"
- L-C. Wang, M-C. Chiang, L. Chen, C-J. Chang, C-Y. Liao, "Performance Comparisons of Downlink Handoff Mechanisms for the WCDMA System in Microcellular Environments".

The Best Paper will be reported in next year's proceedings.

We are pleased to announce the Best Paper selected for MSWiM 2002, in Atlanta, Georgia:

H. Chen, Q.-A. Zeng, and D. P. Agrawal

"A Novel Analytical Modeling for Optimal Channel Partitioning in the Next Generation Integrated Wireless and Mobile Networks"

In addition to the technical papers, MSWiM 2003 program includes a distinguished keynote speaker, Dr. R. Rao, from the University of California, San Diego.

We wish to thank all of you who have contributed to the success of MSWiM 2003. In particular, we thank the Program Committee Members and Referees that offered their time and expertise to provide high quality reviews, within a very tight schedule. We offer special thanks to Rassul Ayani, General Chair, and to Azzedine Boukerche, Finance and Steering Committee Chair, for their assistance and guidance during all stages of the paper review process. We wish to thank Helen Karatza and Mirela Sechi Moretti Annoni Notare, Publicity Co-Chairs, Luciano Bononi, Publicity, Webmaster and System Co-chair, and Maurizio Munafo', Webmaster and System Co-chair, for their invaluable help and dedication. We also thank Henning Schulzrinne: the EDAS system we used to manage submissions and reviews eased our task of dealing with all the aspects of conference organization.

In addition to ACM SIGMOBILE, our main sponsor, we have received support from ACM SIGSIM, the IEEE Computer Society, and the Politecnico di Torino. To these organizations and institutions, we express our gratitude for their support.

We welcome you all to MSWiM 2003, we hope that you will enjoy the workshop, as well as San Diego.

Carla-Fabiana Chiasserini and Hossam Hassanein
Program Co-Chairs, MSWiM 2003

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