HealthGIS 2012

November 6
Redondo Beach, California

First ACM SIGSPATIAL International Workshop on the Use of GIS in Public Health
in conjunction with the 20th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems

Proceedings of the 1st ACM SIGSPATIAL International Workshop on the Use of GIS in Public Health
November 6th, 2012. Redondo Beach, California, USA

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ACM International Conference Proceedings Series
ACM Press

The Association for Computing Machinery
2 Penn Plaza, Suite 701
New York, 10121-0701
FOREWORD

These proceedings contain the papers selected for presentation at the first edition of the ACM Workshop on the Use of GIS in Public Health (HealthGIS 2012) which is being held in conjunction with the ACM SIGSPATIAL GIS conference.

Public health and public healthcare are important social issues with deep implications for government administrations and with large effect on individual standards of living. In many countries, healthcare institutions are being pushed to their limit by an aging population and increased urbanization (which may lead to additional health issues such as pollution). Many of these challenges have strong geospatial components. For example, GIS techniques may be used to determine spatial correlates of health. In addition, the ability to detect and record the location history of individuals and groups using cellular phones coupled with the ability to analyze and visually present large amounts of geospatial data can be harnessed to advance health-related applications. Other notable examples include using geographic information systems and appropriate applications to assist the evacuation of injured people, monitoring the spread of infectious diseases, collecting data for statistical analysis of the effect of pollution on public health, and providing assistance to elderly people with orientation difficulties. These applications necessitate new techniques, systems, and algorithms for effectively utilizing geospatial data in the context of public health.

This program of the workshop is organized in four sessions: (1) Healthcare spatial-related services, (2) Tracking and mapping diseases, (3) Simulation and risk assessment, and (4) Case studies. The program also features a panel where several top experts in the field will discuss about “How to utilize GIS tools for improving health services”.

We would like to thank the many people who contributed to the success of HealthGIS 2012. We thank the authors for providing the content of the program and the program committee for the evaluation process. We would also like to thank the organization committee of ACM GIS 2012 for the help with the workshop planning. Finally, we would like to express our appreciation to the advisory board and especially to Hanan Samet for their guidance and support throughout the review process and program preparation.

We hope that these proceedings will inspire new research ideas, and that you will serve as a valuable resource for the community.

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