Bioinformatics Ph.D. student and Postdoc positions available:

Dr. Jianrong Wang will join Michigan State University (MSU) as an Assistant Professor in January 2017. He is looking for highly self-motivated graduate students and postdocs to join his lab in the Department of Computational Mathematics, Science and Engineering (CMSE). https://cmse.msu.edu/

Dr. Wang received his Ph.D. from Georgia Institute of Technology and his bachelor degree from Tsinghua University. He has worked as a postdoctoral researcher in MIT and Stanford University. His interdisciplinary research is in the fields of Bioinformatics, Machine learning and Systems Biology, with a focus on building novel integrative probabilistic models and efficient machine learning algorithms to infer important biological signatures/patterns for functional genomics, chromatin dynamics, gene regulatory networks and human diseases (e.g. cancer). Specific topics of Dr. Wang's previous research can be found: https://sites.google.com/site/jianrongwangcompbio/

Dr. Wang's research in his lab will continue in the direction of building robust algorithms to integrate heterogeneous high-throughput biological datasets, with specific emphases on:
1) Genome-wide dissection of different regulatory elements and higher-order cell-type specific regulatory networks based on genomic, epigenomic and transcriptomic datasets;
2) Identification of perturbed molecular phenotypes and pathways underlying human diseases based on systems-level modeling of gene regulation;
3) Elucidation of complex 3D chromatin structure dynamics and long-range regulatory interactions across diverse cell differentiation;
4) Computational methodology developments to facilitate efficient design and analysis of new high-throughput experimental techniques.

Dr. Wang has been publishing extensively in top bioinformatics and functional genomics journals, and his research was featured in Science Daily etc. He has participated in the NIH Roadmap Epigenomics Consortium, and has collaborated with scientists across disciplines of biology, statistics and computer science.

Dr. Wang has 1 Ph.D. position (supported as graduate research assistant) and 1 postdoc position available for 2017 Spring or 2017 Fall semesters. The successful candidates are expected to be committed to research listed above. Students with excellent mathematics or statistics background and strong programming skills ((Perl | Python | C | C++ | Java) & R) are encouraged to apply. Knowledge in genomics is a plus but not required. Master students from Bioinformatics, Computer Science and Mathematics background are preferred.

If you are interested, please contact Dr. Wang and send your CV, as well as transcripts, TOEFL and GRE scores, to: wang.jianrong03@gmail.com.

Key dates:
The deadline of the Ph.D. position application for 2017 Spring semester is September 15th, 2016. The deadline of the Ph.D. position application for 2017 Fall semester is January 15th, 2017. There is no deadline for the Postdoc position application.

For specific departmental requirements, see: https://cmse.msu.edu/academics/graduate-program/phd-in-computational-mathematics-science-and-engineering