

Bei Wang

Duke University
Department of Computer Science
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RESEARCH INTERESTS Data structure, design and analysis of algorithms, specifically but not limited to: algorithms in computational geometry and topology; algorithms in computational biology; algorithms in data management

COURSES Algorithms Design and Analysis; Algorithms in Computational Biology; Artificial Intelligence; Computational Complexity; Computational Topology; Theory of Computation; Topology; Advanced Computer Architecture; Computational Macromolecule Structure; Principle of Programming Language; Theory of Database System; Structure of Biological Macromolecules.

EDUCATION ♦ **Duke University**, Durham, NC. (09/2004 – present)
Ph.D. in Computer Science, expected graduation: 2009.

 ♦ **State University of New York at Stony Brook**, Stony Brook, NY. (09/2003 – 05/2004)
Graduate student in Computer Science
GPA 3.92/4.0

 ♦ **University of Bridgeport**, Bridgeport, CT. (09/1999 – 05/2003)
B.S. in Computer Science and Mathematics, minor in Psychology
Summa Cum Laude, Highest Honor in Computer Science
GPA 3.91/4.0

RECENT WORK EXPERIENCE ♦ **Summer Intern**, Cisco, San Jose, CA (6/07-9/07). Working with IP Engineering in designing and optimizing data structure within Cisco IOS. Programming: C.

 ♦ **Research Intern**, HP Labs, Palo Alto, CA (6/06-9/06). Design algorithms for clustering graphs. Programming: MATLAB.

 ♦ **Research Assistant**, Department of Computer Science, Duke University, Durham, NC (9/06–present). Programming: C/C++, Perl.

 ♦ **Graduate Teaching Assistant**, Department of Computer Science, Duke University, Durham, NC (9/05–12/05, 1/07–5/2007). Teaching assistant for the class Algorithms in Computational Biology, Discrete Mathematics.

 ♦ **Graduate Teaching Assistant**, Department of Computer Science, State University of New York at Stony Brook, Stony Brook, NY (9/03–05/04). Teaching assistant for JAVA programming course.

RECENT MANUSCRIPTS ♦ Wang B., Edelsbrunner H. and Morozov D. Computing Elevation Maxima by Searching the Gauss Sphere, 2008 (Manuscript).

- ◇ Enstero M., Akerborg O. , Lundin D., Wang B., Furey T. S., Ohman M. and Lagergren J. A Computational Screen for Site Selective A-to-I Editing, 2008 (Manuscript).
 - ◇ Wang B., Phillips J. M., Schreiber R., Wilkinson D., Mishra N. and Tarjan R. Spatial Scan Statistics for Graph Clustering. SIAM International Conference on Data Mining (SDM08), Atlanta, Georgia, April 24-26, 2008.
 - ◇ Sahu S., Wang B. and Reif J. H. A Framework for Modeling DNA Based Molecular Systems. Lecture Notes in Computer Science (LNCS): DNA Computing, 250-265, 2006.
 - ◇ Wang B., Papamichail D., Mueller S. and Skiena S. Two Proteins for the Price of One: The Design of Maximally Compressed Coding Sequences. Eleventh International Meeting on DNA Based Computers (DNA11), Ontario, Canada, June 6-9, 2005. Lecture Notes in Computer Science (LNCS), 3892 (2006) 387-398. Also in Natural Computing, 2006.
- PAST PUBLICATION
- ◇ Sobh T. M., Coble K.W. and Wang B. Experimental Robot Musician. Proceedings of the Journal of Intelligent and Robotic Systems (2003).
 - ◇ Sobh T. M., Wang B. and Patel S. H. A Mobile Wireless and Web Based Analysis Tool for Robot Design and Dynamic Control Simulation from Task Points Descriptions. Journal of Internet Technology, Vol. 4 No.3: 153 162 (2003)
 - ◇ Sobh T. M., Sanyal R. and Wang B. Web Based Remote Surveillance of Mobile Robot. Journal of Internet Technology, Vol. 4 No. 3: 179 184 (2003)
 - ◇ Sobh T. M., Wang B. and Patel S. H. Web Enabled Robot Design and Dynamic Control Simulation Software Solutions from Task Points Description. Proceedings of the 29th Annual Conference of the IEEE Industrial Electronics Society, Roanoke, Virginia, Nov.2nd – Nov.6th, 2003 (IECON'03)
 - ◇ Wang B., Hoang D., Daiz I., Okpala C. and Sobh T. M. Experimental Collective Intelligence Research Tool. Proceedings of the 4th International ICSC Symposium on Engineering of Intelligent Systems, Island of Madeira, Portugal, Feb.29 Mar. 2, 2004 (EIS 2004)
- SKILLS
- ◇ Programming: C/C++, Pascal 7.0, Delphi, Visual Basic, Java, LISP, Perl
 - ◇ Web Development: JSP, Servlet, ASP
 - ◇ Fluent spoken/written Chinese and English
- SELECTED HONORS
- ◇ 2003 Phi Kappa Phi Award of Excellence
 - ◇ 2002 Sigma Xi Grant-in-Aid of Research recipient
 - ◇ 2002 Upsilon Pi Epsilon Microsoft Scholarship Award
- OTHER ACTIVITIES
- ◇ Member of ACM Programming Contest team representing State University of New York at Stony Brook (2003)
 - ◇ Co-chair, Networks and Internet session of Industrial Information Technology, the 29th Annual Conference of the IEEE Industrial Electronics Society (IECON 03)
- REFERENCE
- Dr. Herbert Edelsbrunner. Computer Science, Duke University. edels@cs.duke.edu
 - Dr. Pankaj Kumar Agarwal. Computer Science, Duke University. pankaj@cs.duke.edu
 - Dr. Sayan Mukherjee. Statistics and Computer Science, Duke University. sayan@stat.duke.edu