curriculum vitae

# **DEEPAK KUMAR**

Professor & Chair, Department of Computer Science, Bryn Mawr College

Office

# **Employment/Positions**

- Chair, Department of Computer Science. Bryn Mawr College. Spring 2015, Spring 2020–ongoing.
- **Associate Director for Education and Diversity**, NSF Foundations of Data Science Institute (FODSI), January 2021-present.
- **Member of the Executive Committee**, NSF Center for Science of Information, August 2010-present.
- Chair of the Center Visibility Committee, NSF Center for Science of Information, August 2013-present.
- **Associate Director for Education and Diversity**, NSF Center for Science of Information, August 2010-present.
- Chair, Department of Computer Science. Bryn Mawr College, July 2010 to June 2011.
- Professor of Computer Science, Department of Computer Science, Bryn Mawr College, (August 2005—present).
- Chair of IFIP WG3.2 Technical Committee on Undergraduate CS Education, 2009-2010.
- **Member** of the ACM Education Council, 2007-2016.
- Columnist, ACM Inroads, 2014-present.
- Columnist and Associate Editor of ACM Inroads, 2009-2013.
- Columnist and Associate Editor of ACM SIGCSE Inroads, 2008-2009.
- **Member** of the Computer Science AP Advisory Board, 2008-present.
- Chair, Science Chairs, Bryn Mawr College, 2006-2007.
- Chair, Computer Science Program, Bryn Mawr College, (August 2005—2007).
- Associate Editor of ACM TOCE (Transactions on Computing Education), formerly JERIC (Journal of Educational Resources in Computing), 2004-2012.
- Associate Professor and Chair of Computer Science, Computer Science Program, Bryn Mawr College (August 1999--2004).
- Assistant Professor of Computer Science, Department of Mathematics &

- Architecture. International Journal of Cybernetics & Systems, Taylor & Francis, 36(2), 2005.
- 5. with Robert Aiken, Giorgio Ingargiola, Judith Wilson, and Rebecca Thomas: Lessons learned: Tips From Conducting An NSF Faculty Enhancement

26. with Lisa Meeden: Robots in the Undergraduate Curriculum. Proceedings of the Third Annual CCSC (Consortium for Computing in Small Colleges) Northeastern Conference, The Journal of Computing in Small Colleges, John G. Meike (editor), Volume 13, Number 5, May 1998.

27. with Lisa Meeden: A Robot Laboratory for Teaching Artificial Intelligence. Proceedings of the Twentynth SIGCSE Technical Symposium on Computer Science Education, ACM SIGCSE Bulletin, D. Joyce (editor), Volume 30, Number 1, Pages 341--

Scien**e**, Keith E. Bettinger (editor), Department of CS Technical Report, March, 1990.

41.

# **World Wide Web Materials**

- 1. Science of Information: Course materials and repository. At www.soihub.org and also on cs.brynmawr.edu. 2012-present
- 2. Creative Computing and Visual Portfolios for Introductory Computing. With Dianna Xu and Ira Greenberg. At cs.brynmawr.edu/visual. 2010-present.
- 3. Myro Curricular materials (www.roboteducation.org)
- 4. (collaborative/wiki web) Pyro Documentation (http://emergent.brynmawr.edu/wiki/index.cgi/PyroTutorial), 2002 to present.
- 5. with Lisa Meeden: A Robot Laboratory for Teaching Artificial Intelligence: Ss4.3 (o)0.5 (r)1.713 -1n(l)-4.5 8d.5 (T)2Body €1n7 K)3

- Annual Report 1987, RADC-TR-88-324, Vol II(of nine) Part B, RADC Griffiss Air Force Base, NY.
- 6. A Friendly User Interface for Multi-variable, Non-linear Regression Analysis. National Council for Applied Economic Research Technical Report, New Delhi, India, 1983.
- 7. Programming in Devnagiri using SARAL. In A. P. Mathur (ed) Final Report of the Devnagiri Project Dept. of CS Technical Report, BITS, Pilani, 1983.
- 8. Wordprocessing in Devnagiri. In A. P. Mathur (ed) Final Report of the Devnagiri Project Dept. of CS Technical Report, BITS, Pilani, 1983.
- 9. Extending the Sirpur Paper Mills Payroll Application Package. BITS Practice School-I Technical Report, BITS, Pilani, 1981.

#### **Instructional Materials**

- 1. Structured weekly labs for CMSC110 (Introduction to Computing)
- 2. Structured weekly labs for CMSC113 (Computer Science 1)
- 3. Structured weekly labs for CMSC206 (Data Structures)
- 4. Structured weekly labs for CMSC246 (Systems Programming)
- 5. Structured weekly labs for CMSC330 (Algorithms: Design & Practice)
- 6. Learning Computing with Robots (Textbook for CS1)
- 7. Pyro Modules
- 8. Getting Wired with Java: A Laboratory Manual for CS 110
- 9. Laboratory Manual for the AI Robot Laboratory
- 10. Laboratory Manual for CS 110
- 11. Hello, Ada! A Laboratory-Based Introduction to Ada.

#### **Professional Activities**

**Affiliations:** AAAI (member for life), ACM, SIGART, SIGCSE, SIGCAS.

### **Conference/Workshop organization**

Convenor for AALAC Fac-6.193 0 T Laboratory, S0B.5 (ryf 12 0 0 12 )-2.2 (e)9.7 (n)-7 (o)0.5 (r)1.7

- Organizing Committee of Research Directions in Science of Information Workshop/SymposiumNational Academy of Engineering, Irvine, CA, August 2014.
- Organizing Committee for Summer Schooln Computational Art and Creative Coding Bryn Mawr College. Bryn Mawr, PA. July 2014.
- Organizing Committee of Science of Information Summer Schoolrdue University, West Lafayette, IN, June 2013.
- Organizing Committee for Workshop on Computational Art and Creative Coding SIGCSE 2012. Denver, CO. March 2012.
- Organizing Committee of Science of Information Summer Schodinford University, Stanford, CA, June 2012.
- Convener of Mellon AALAC Workshop on "Information" for Liberal Arts faculty. Bryn Mawr, PA, October 2012. MA6--6.022(3.6 (al)-2.6C)n0.00ta6 5[2[Av)c]T5n(on)3b. (e6.0a(v))

- Coordinator of a Special Track on AI Education, Florida AI Research Symposium, 1996.
- Co-Coordinator of a Special Track on Emerging Paradigms for Intelligent Systems, HICSS-29, 1996.
- Coordinator of a Special Track on Emerging Paradigms for Intelligent Systems, HICSS-28, 1995.
- Coordinator of a Special Track on Emerging Paradigms for Intelligent Systems, HICSS-27, 1994.
- Member of the organizing committee of the 1992 AAAI Spring Symposium on Propositional
- Knowledge Representation, Stanford University, CA, March 1992.
- Chair of the 1990 SNePS Workshop, Buffalo, NY, October 1990.
- Chair of the 1989 SNePS Workshop, Buffalo, NY, November 1989.

Curriculum Development (at Bryn Mawr College): Responsible for creating and

Marshall College, Hamilton College, Haverford College, Knox College, Lafayette College,

- **Member of Advisory Board** of Extending Computing Education Pathways (Collaborative Project by GeorgiaTech and U-Mass).
- Panelist for research proposal reviews for the European Commission's
  Framework Programme 7 (FP7)-ICT Cognitive Systems & Robotics (STREP, IP),
  2006, 2009-present.
- External Evaluator for funded research program (MINDRACES) for the European Commission's Framework Programme 6 (FP6)-ICT Cognitive Systems & Robotics. 2006-2008.
- **Member of Advisory Board** of IPRE (Institute for Personal Robots in Education—www.roboteducation.org). 2006-present.
- Organizer of the Computing History Month (April 2003) at Bryn Mawr College.

# 3. NSF STC award

# **Invited Talks**

- Contexts of Computing Education: Graphics, Robots, Data, Informaltimeted talk at Princeton University sponsored by Joint Chapter of the ACM/IEEE. December 2014.
- An Introduction to Science of Information interest Villanova University (in a course on Cell Signalling). September 2014.

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