# **RESUME**

## Irena Pevac, PhD

# **Department of Computer Science Central Connecticut State University**

## **POSITIONS**

- CCSU, New Britain
  - Assistant Professor 1992-1998
  - o Associate Professor 1998-2013
  - o Professor 2013 present
- Univ. of Belgrade
  - o Assistant Professor 1988-1991
- Univ. of Texas at Austin
  - Visiting Professor 1988 (Fall)
  - o Research Fellow 1992 (Spring)
- ❖ Mathematical Institute, Academy of Science, Belgrade, Serbia
  - o Research Assistant 1973-1983
  - Research Fellow 1983-1991

## **EDUCATION**

- ❖ BA, Math, Univ. of Belgrade, 1973.
- ❖ MS, CS, Automata and Grammars, Univ. of Belgrade, 1976.
- ❖ PhD, CS, Artificial Intelligence, Univ. of Belgrade, 1987.

## **TEACHING**

Workshop in CS – MS Office 2007, Introduction to Computers (non-majors) – Visual Basic, Introduction to Programming (majors) CS1 in Pascal and Java, Advanced Programming Concepts-CS2, Data Structures, Topics in CS –Java and Delphi, Database Concepts, Advanced Database Topics, Algorithms, Theory of Computation, Foundations of Computer Science, Automated Theorem Proving, Artificial Intelligence.

## **RESEARCH AREAS**

Publications include monograph on automated theorem proving, two books on recursion (in Pascal and in Java), and number of papers published in refereed journals and conf. proceedings. Topics range from automata theory, undecidability, artificial intelligence, databases, algorithms, to CS education.

#### RECENT PUBLICATIONS

- 1. Pevac I. Performance Analysis of Recursive Graphical Curves. *Proc of International Conference on Computer Science and its Applications*, ICCSA July 2003, San Diego, CA, pages 46-49.
- 2. Rajaravivarma. R., Pevac, I. When to Introduce Objects in Teaching Java. *Proc. of 35 IEEE SSST*. March 2003, Morgantown, Virginia, pages 437-440.
- 3. Pevac I. Visualizing the Time Complexity of Recursive Graphical Algorithms. *Proc of 2nd International Conference on Computer Science and its Applications*, ICCSA July 2004, San Diego, CA, pages 88-92.
- 4. Pevac I. *Recursive Examples in Java*. XanEdu-OriginalWorks, 2005. <a href="http://xanedu.proquest.com/originalworks/Prevac">http://xanedu.proquest.com/originalworks/Prevac</a>
- 5. Pevac I. Analysis and Visualization of Time Complexity in Fractal Algorithms. *Computer Science and Information Systems (PART VI: Computer Science Research in Relation to Theoretical and Natural Sciences and Engineering)* (Ed. Dr Petratos and Dr Michalopoulos). Athens Institute of Research, Greece, 2005, pages 337-350.
- 6. Pevac I. Using Visualization to Teach Recursion throughout a Computer Science Curriculum. WORLDCOMP'07 - FECS, Proc. of the 2007 Int. Conf. on Frontiers in Education: Computer Science & Computer Engineering, Las Vegas, NV, SCREA Press, 2007. (Ed. Arabnia, Clincy), pages 212-218.
- 7. Pevac I. Comparison of E-R, UML, IDEF1X, and SOM Database Modeling Paradigms. *Current Advances in Computing, Engineering and Information*. Athens Institute of Research, 2008, (Editors Petratos and Dandapani), pages 279-286.
- 8. Pevac I. An Introduction to Programming Course Made Exciting and Inviting for Non-majors. *Proc of the 2009 International Conference on Engineering and Mathematics ENMA'09* Bilbao, Spain, Purple Gate publishing, 2009, pages 197-203.
- 9. Pevac I. Using Performance Equivalent Graphical Examples to Visualize and Simplify Time Efficiency Analysis of Recursive Algorithms. WORLDCOMP'09 FECS, *Proc. of the 2009 Int. Conf. on Frontiers in Education: Computer Science & Computer Engineering*, (Ed. Arabnia, Clincy), Las Vegas, NV, SCREA Press, 2009, pages 254-260.
- 10. Pevac I., Carpenter T. ESRATEA Educational Software for Recursive Algorithm Time Efficiency Analysis, WORLDCOMP'10 FECS, *Proc. of the 2010 Int. Conf. on Frontiers in Education: Computer Science & Computer Engineering,* (Ed. Arabnia, Clincy), Las Vegas, NV, SCREA Press, 2010, pages 367-373.
- 11. Pevac I. An Approach to Increase Student Motivation in Introductory Programming Course, IJKST, April 2010, number 2, volume 1, pages 59-65.
- 12. Pevac I. Using Templates to Introduce Time Efficiency Analysis in an Algorithms Course. WORLDCOMP'11 FECS, *Proc. of the 2011 Int. Conf. on Frontiers in Education: Computer Science & Computer Engineering*, (Ed. Arabnia, Clincy), Las Vegas, NV, SCREA Press, 2011,

pages 373-379.

- 13. Pevac I. et al. TARA Application for Time Analysis of Recursive Algorithms, WORLDCOMP'11 FECS, *Proc. of the 2011 Int. Conf. on Frontiers in Education: Computer Science & Computer Engineering*, (Ed. Arabnia, Clincy), Las Vegas, NV, SCREA Press, 2011, pages 357-362.
- 14. Pevac I. First Experiences with Software Tool for Recursive Algorithm Time Efficiency Analysis. *Journal of Computing Sciences in Colleges*, 28 (1) 2012, pages 56-65.

#### RECENT RESEARCH GRANTS

- Visualizing the Performance Analysis of Recursive Algorithms. University Research Grant, 2004.
- Developing Educational Software for Algorithm Efficiency Analysis by Utilizing Equivalent Graphical Examples. University Research Grant, 2010-2011.
- Investigating the influence of the use of ESRATEA software on student learning of recursive algorithm time performance analysis. University Research Grant, 2011-2012.
- Improved Version of the Tutor for Time Performance Analysis of Recursive Algorithms that Uses Simpler Visualization Techniques. University Research Grant, 2013-2014.

## **BOOK REVIEWS**

- Jones W. Java au Naturel. Web publ. 2003. www.cs.ccsu.edu/~jones/book.htm
- ❖ Dean & Dean. Introduction to Programming with Java − A Problem Solving Approach. McGraw-Hill, 2007.

## **CONSULTING**

❖ Worked for Pearson. Prepared 70 examples and their solutions for the international edition of David Schneider's book *An Introduction to Programming Using Visual Basic 2008*. Summer 2008.

## HONORS AND MEMBERSHIPS

- Biography included in the Dictionary of International Biography and in the Who is Who among Women.
- ❖ Honorary member of Upsilon Pi Epsilon.
- ❖ Excellence in Teaching Honor Roll, CCSU. 1998, and 2012.
- Nominated for the Top 100 Educators by the International Biographical Center in 2004, 2005, 2006, 2008, and 2012.
- Member of the ACM, and IEEE Computer Society.