EHSAN TABARI

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EDUCATION

University of North Carolina at Charlotte (UNCC) — Charlotte, NC

- PhD in Bioinformatics.
- Passed Qualifying Exam on April 27, 2010.
- Started in spring of 2009.

University of Tehran (UT) — Tehran, Iran

- M.Sc. in Computer Science.
- Graduated on July 10, 2006.
- Full two year course and a thesis.
- GPA 19.17 in 0-20 scale grading system.
- Thesis Title: Generating Tree with ‘n’ nodes and ‘m’ leaves.

Shahid Beheshti University (SBU) — Tehran, Iran

- B.Sc. in Computer Engineering – Software.
- Graduated on September 22, 2003.
- The program is full 4 year plus a final B.Sc. project.
- B.Sc. Project Title: Design and Implementation of Distributed Applications.

RESEARCH EXPERIENCES

Bioinformatics

- I am working on prokaryotic transciptional modeling including modeling of operons and biases in RNASeq.
- I have been working on IGB (Integrated Genome Browser) tool.
- I have implemented an online annotation database for Blueberry ESTs.
  This was a part of Blueberry transcriptomics and genomics project at NCRC.
- I have worked on Miner Software. Miner is a tool for phylogenetic motif identification.
  I implemented a standalone version of miner, which is going to be published (draft available).
- I worked on a tool to modify Affymatrix CEL/CDF files (published).
- I worked on the algorithms which generation of the secondary structures of RNA.
  This was the direct result of my thesis and is published as a paper.

Theoretical Computer Science and Algorithms

- I've intensively studied combinatorial Objects in computer science and their generation, ranking and unranking.
- My M.Sc. thesis is about generating trees with 'n' internal nodes and 'm' leaves.

Artificial Intelligence and Machine Learning

- I've worked on distributed agent environment AI techniques.
- I was a part of Hurricane Robocup Rescue Simulation Team.
  We participated in Robocup world 2004 in Portugal.
- I was a part of SBCe2003 Robocup Soccer Presentation Team.
  We participated in Robocup world 2003 in Italy.

EXTRACURRICULAR ACTIVITIES

Working at NC Research Campus in summer of 2009.

I worked on Blueberry transcriptomics and genomics project creating an online annotation database.
I also helped in GUI changes to IGB (Integrated Genome Browser).

Participation in RoboCup Rescue Simulation League in Portugal 2004.

We participated to the Rescue Simulation League remotely and with no affiliation.
Published team description can be found at http://www.etabari.com

Participation in RoboCup Soccer Simulation League in Italy 2003.

We attended the league with affiliation to SBU.
We introduced Team Assistant 2003. Team Assistant is a comprehensive debugging and analysis tool for RoboCup Soccer Simulation team developers.
TA has received considerable attention from the RoboCup community and was placed 4th in the voting for "Best game presentation & Analysis".

Participation in ACM International Computer Programming Contest, Asia 2000.

HONORS, PRIZES, AND MAJOR PUBLICATIONS

- Christopher C Overall, D ANDREW Carr, **Ehsan S Tabari**, Kevin J Thompson, Jennifer W Weller, *"ArrayInitiative - a tool that simplifies creating custom Affymetrix CDFs"* BMC Bioinformatics (2011)12 (1) p. 136

- **Seyedi-Tabari, E.;** Ahrabian, H.; Nowzari-Dalini, A., "*A new algorithm for generation of different types of RNA*" International Journal of Computer Mathematics (2008). 21 Jul. 2009.
  [This work was in part supported by a grant from IPM (No. 84920018).]

- **Tabari E.**, "Generation of trees with 'n' nodes and 'm' leaves" Masters Thesis (2006)
  [The English abstract as well as Persian (Farsi) full text is available at http://www.etabari.com]

- I was the top student of the department of math, statistics and computer science at UT.
  I achieved the highest GPA since the program was being offered at UT.

- I received the 4th award in RoboCup Soccer Simulation League – Game Presentation and Analysis in Italy 2003.

TEACHING EXPERIMENTS

Courses Taught:

"Advanced Programming Concepts for Biotechnology Students", Biotechnology Department of UT, Fall 2007.
This course covers OOP, C++ and Data Structures.

"Fundamentals of Computer Science and Programming", Biotechnology Department of UT, Fall 2007. This course covers basic of CS and C++.

"Fundamentals of Computers and Programming", Social Sciences and Economics Department of Alzahra University, Fall 2007.
This course covers principals of Personal Computers and Pascal.

"Advanced Programming Concepts", Computer Science Department of UT, spring 2007.
This course covered OOP and C#.

Teaching Assistantship for:

"Programming for Bioinformatics", Department of Bioinformatics and Genomics at UNCC, Fall 2010.
This is a graduate level course covering Pyhton, R and Java and is taught by Dr. A. Loraine.

"Parallel Algorithms", Computer Science Department of UT, Fall 2005.
This course is taken by MS students in their second semester and taught by Dr. H. Ahrabian.

"Theory of Computer Science", Computer Science Department of UT, Spring 2004.
This course is taken by MS students in their first semester and taught by Dr. H. Ahrabian.

"Advanced Programming Concepts", ECE Department of SBU, Spring 2000.
This course is the second programming course for undergraduate computer students and taught by Dr. Bahman Pourvatan.

Courses Taught at precollege level:

"Computers and Programming (Beginners)", Roozbeh Secondary schools, 1998 and 1999.
The course was for the students of 1st year in middle school and covered elementary programming concepts using Logo programming language.

"Computers and Programming (Intermediate)", Roozbeh Secondary schools, 1998 and 1999.
The course was for the students of 2nd year in middle school and covered intermediate programming concepts using Logo programming language.