

# EHSAN TABARI

[ehsan@tabari.info](mailto:ehsan@tabari.info)  
<http://ehsan.tabari.info>

Graduate Research Assistant  
Department of Bioinformatics and Genomics  
Bioinformatics Building, Room 304  
University of North Carolina at Charlotte  
9201 University City Blvd, Charlotte, NC 28262

## EDUCATION

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University of North Carolina at Charlotte 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 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

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### Bioinformatics

- I am working on TSS prediction using both genomic and epigenetic data.
- 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.
- I worked on Affymatrix CEL/CDF files to build a gene killer tool which is going to be 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

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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://ehsan.tabari.info>

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 4<sup>th</sup> in the voting for "Best game presentation & Analysis".

More information including published team description can be found at

<http://www.sbcee.net/pres>.

Participation in ACM International Computer Programming Contest, Asia 2000.

## HONORS, PRIZES, AND MAJOR PUBLICATIONS

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- **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://ehsan.tabari.info>]
- 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 4<sup>th</sup> award in RoboCup Soccer Simulation League – Game Presentation and Analysis in Italy 2003.

## TEACHING EXPERIMENTS

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### **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.

"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 Mr. 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 secondary 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 secondary school and covered intermediate programming concepts using Logo programming language.