

CURRICULUM VITAE

Qanita Bani Baker

EDUCATION

- Ph.D., Computer Science. Utah State University, Logan, UT. 2015.
- M.S., Computer Science. Jordan University of Science and Technology, Irbid, Jordan. 2007.
- B.S., Computer Science. Jordan University of Science and Technology, Irbid, Jordan. 2004.

RESEARCH INTERESTS

- Bioinformatics
- Computational Biology
- Bio-image Analysis
- Sensor Technology
- High Performance Computing
- Image Progressing

PUBLICATION

DISSERTATION/THESIS

- Bani Baker, Qanita, "Computational Modeling to Study Disease Development: Applications to Breast Cancer and an in vitro Model of Macular Degeneration" (2015). All Graduate Theses and Dissertations. Paper 4409. <http://digitalcommons.usu.edu/etd/4409>
- Developing Middleware Mechanisms to Support Energy-Efficient Wireless Sensor Networks. By Qanita BaniBaker, Dr. Ayad Salhieh. Thesis submitted in partial fulfillment of the requirements for the degree of M.Sc. in Computer Science .At The Faculty of Graduate Studies Jordan University of Science and Technology. May 2007.

PUBLICATIONS IN CONFERENCE

- Qanita Bani Baker, Gregory J. Podgorski, Christopher D. Johnson, Elizabeth Vargis, Nicholas S. Flann, Bridging the Multiscale gap: Identifying Cellular Parameters from Multicellular Data. IEEE, 2015
- Qanita BaniBaker, Soonjo Kwon, Ahmadreza Ghaffarizadeh, Gregory J.Podgorski, Nicholas S. Flann, An Agent-based Model of Ductal Carcinoma in situ (DCIS) and its Validation in a Tissue-engineered . IBE Annual Conference. Raleigh. North Carolina. (March. 6-8, 2013)
- Qanita BaniBaker, Gregory J.Podgorski, Nicholas S. Flann, Interaction Stroma and Tumor Growth in Ductal Carcinoma in Situ Metastasis: 2D and 3D Agent-Based Modeling .Utah state university tenth annual celebration of faculty and student research at Utah State University. Logan. USA (Apr. 4-11, 2014).
- Agentbased model for breast tissue culture development in vitro. Qanita Bani Baker, Nicholas S. Flann, Soonjo Kwon, Gregory J. Podgorski, and Ahmadreza Ghaffarizadeh, Utah State University. IBe 2014
- A 3D agentbased model of the transition from ductal carcinoma in situ to invasion. Qanita Bani Baker, Nicholas S. Flann, Soonjo Kwon, Gregory J. Podgorski, Ahmadreza Ghaffarizadeh, IBe 2014

PUBLICATIONS IN JOURNALS

- Qanita Bani Baker, Ahmadreza Ghaffarizadeh, Soonjo Kwon, Gregory J. Podgorski and Nicholas S. Flann. Interaction of Stroma and Tumor Growth in Ductal Carcinoma in Situ Metastasis: An Agent-Based Modeling Approach. 2016(under review)
- Qanita Bani Baker, Gregory J. Podgorski, and Elizabeth Vargis , Nicholas S. Flann. Developing in Silico Model to Study the Effect of Retinal Pigment Epithelial Cell Patch Size.2016(under review)

POSTER

- Qanita Bani Baker, Ahmadreza Ghaffarizadeh, Soonjo Kwon, Gregory J. Podgorski and Nicholas S. Flann. Interaction of Stroma and Tumor Growth in Ductal Carcinoma in Situ Metastasis. An agent based model. Short Course. USC. Los Anglos. USA. (Oct.21 2013)
- Qanita Bani Baker, Ahmadreza Ghaffarizadeh, Soonjo Kwon, Gregory J. Podgorski and Nicholas S. Flann. Interaction of Stroma and Tumor Growth in Ductal Carcinoma in Situ Metastasis. Utah state university tenth annual celebration of faculty and student research at Utah State University. Logan. USA (Apr. 4-11, 2014).
- Interaction of Stroma and Tumor Growth in Ductal Carcinoma in Situ Metastasis: A 2D Agent-Based Modeling. SBI Science and Technology Review Winter Meeting. Utah State University Eccles Conference Center. (Feb.12, 2014)

- Developing in Silico Model to Study The Effect of Retinal Pigment Epithelial Cell Patch Size. USU Jan 6 2015

HONORS AND AWARDS

- Scholarship from Jordan University of Science and Technology to study PhD in computer science at Utah state university. August 2011
- Travel award from USC (university of southern California) to attend the Short Course and participate in poster session. October 2013
- Travel award from USU (Utah state university) to attend Raleigh. North Carolina. (March. 6-8, 2013)
- Wining poster award among the graduated students in Utah State University CS department. Fall 2013.
- Wining poster award among the graduated students in Utah State University CS department. Spring 2014.
- USU Pinnacle Honor Society.
- USU Golden Key Society.

TEACHING EXPERIENCE

- Graduated Student/Teaching Assistant , Department of Computer Science, Utah State University (Sep 2011- now)
- Full Time Instructor, Computer Science Department Jordan University of Science and Technology (May2008 - July 2011): Teaching C++, visual basic, Vb.Net, introduction to information technology. Web design courses, computer skills, and working as supervisor for graduated project.
- Part Time Instructor, Computer Science Department Jordan University of Science and Technology (July 2007 - May 2008): Teaching web design courses, computer skills, and different programming language courses (C++,Java,Vb,and Vb.Net).
- Graduated Student/Research Assistant Department Jordan University of Science and Technology (Feb 2005 - May 2007)

TRAINING AND WORKSHOP

- International Teacher Assistance workshop nov-2011(USU,UT,USA)
- INTERNATIONAL VISITOR LEADER SHIP PROGRAM. UNITED STATE DEPARTMENT OF STATE .BUREAU OF EDUCATIONAL AND CULTURAL AFFAIRS.

- Attendance in the 23rd Annual Conference on Distance Teaching And Learning ACADEMY FOR EDUCATIONAL DEVELOPMENT. August, 2007 .Monona Terrace Convention Center. Madison, Wisconsin, U.S.A.
- International Computer Driving License certification/issued by the UNESCO Cairo office.
- Three (3) months in JUST computer center to learn Oracle.2003.
- World-links certificate/worlds linked organization (160 hours).
- Computer maintenance courses and certification/AI- shark center (84 hours).
- English conservation Certification / from oxford center (32 hours).
- online training courses/ HKJ -Ministry Of Education and ESP(100 hours).
- Teaching methods / HKJ -Ministry Of Education(60 hours).

KEY SKILLS

- 2D/3D Modeling , Multi-scale Modeling
- Programming Language :(C++(under window or linux), VISUAL BASIC.NET, C, Java, AspectJ).
- Web Programming (XHTML, HTML, XPath, XQuery, XML)
- Database Management System: (SQL, Oracle, Advanced Access)
- Web Page Application (ASP.NET)
- Multimedia Software/Visualizations: POVRay,ImageJ, Parview.
- Parallel Computing: MPI under Linux-C++.
- Image Processing Language MATLAB.

PERSONAL SKILLS AND COMPETENCES

- Communication skills, team work and ability to work under pressure for long hours. Have the potential of learning new programming languages and technologies. Have the spirit of proficiency and creativity. Fast learner, enthusiastic, dedicated, organized, clear and logical thinker, motivated, reliable. Ability to work as programming Languages Instructor and applications trainer.
- LANGUAGES: Arabic (Fluent), English (Excellent) 99 in TOEFL-IBT