Maeda Hanafi
New Haven, CT, USA
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Education:

PhD in Computer Science. New York University (NYU). Fall 2015 – Present.

Bachelor's of Computer Science. Southern Connecticut State University (SCSU). Sept. 2009– Fall 2012
- GPA 3.62/4.0
- Honors Convocation, Cum Laude Award, Spring 2013
- National Society of Leadership and Success, Presidential Award, Spring 2013
- Honors Convocation, Academic Excellency Award in Computer Science, Spring 2012
- Dean's List, College of Arts and Sciences, Spring 2010, Fall 2011, Spring 2012, Fall 2012
- Earned college credits while in high school from Gateway Community College (Sept. 2008 - May 2009) with a of GPA 3.73/4.0 (Dean's List Fall 2008 and Spring 2009)

Hanafi Homeschool, Highschool, West Haven, CT, Graduated 2009

Research Experience:

Research Assistant, Design Technology Lab, New York University Abu Dhabi (NYUAD). Summer 2014 – Present.
- Advisor: Azza Abouzied
- Implemented program synthesizer for learning and structuring unstructured datasets

Research Assistant, Computer Science Dept., SCSU. Fall 2013 - Spring 2014
- Advisor: Amal Abdel-Raouf
- Co-authored and published paper on software maintenance from perspective of change theory

Teaching Experience:

Teaching Assistant, CSC321 Algorithm Design and Analysis, CSC152 Computer Programming I, CSC310 Multimedia Systems. Computer Science Dept., SCSU, Spring 2013

- Instructor: Prof. Amal Abdel-Raouf
- Graded and corrected homeworks and Java programming projects, and assisted students with homework assignments.

Teaching Assistant, CSC310 Multimedia Systems, CSC152 Computer Programming I, CSC200 Information Management and Productivity Software. Computer Science Dept., SCSU, Fall 2013

- Instructors: Prof. Amal Abdel-Raouf, Prof. Taraneh Seyed
- Conducted tutor sessions for Java programming

Working Experience:

Voluntary Web Developer Internship, Algosmith Computing, West Haven, CT. Summer 2010.
- Assisted in build an ecommerce project using asp.net
- Built a database (MS SQL server 2008)

Voluntary Database Internship, Masjid Al Islam Organization, New Haven, CT. Summer 2009.
- Managed and updated the website (http://www.masjidalislam.net/) (PHP and Joomla)
- Gathered the data to put into the database (MySQL)

Research Publications:

- Hanafi M, and Abdel-Raouf A. ***Software Maintenance from the Change Theory Perspective.*** Proceedings of the 2014 International Conference on Circuits, Systems, Signal Processing, Communications and Computers (CSSCC '14), Venice, Italy. 2014 Mar.
- Hanafi M, and Abdel-Raouf A. ***Change Theory: Towards a Better Understanding of Software Maintenance***. WSEAS Transactions on Computers, Volume 13, 2014: 421-9. 2014

Graduate Courses

- Web Programming ('13), Advanced Database System ('13), Computer Networks ('13), Computer Graphics ('13), Multithreaded Distributed Programming ('13), Advanced Software Engineering ('13)

Undergraduate Courses

- Data Mining ('12), CS Project Seminar ('12), AI ('12), Algorithms ('11), Software Design and Development ('11), E-Commerce ('11), Computer Organization ('10), Database ('10), OS ('10), Data Structures ('10), Networks ('10)

Languages

- Java, JavaScript/Node.js, SQL, PHP, Ruby on Rails, CSS, XML, Android Java, C++/C

Extra-Curricular and School Programming and Research:

Heroku Webapp and Cloud Services Integration, Fall 2013 and Spring 2014

- Integrated PostGresSQL database with Heroku platform using node.js for RSS feed reader
- Incorporated game development concepts in JS and HTML5 for a Multiplayer Shapes Game
- Developed Web app on AWS and deployed to Heroku

Pacman Animation with OpenGL C++, Animation Project, Fall 2013

- Implementation of transformations on matrices
- Programmed with OpenGL and C++ for controlling timers and OpenGL primitives, surfaces, and lighting for animation
- Implemented anti-aliasing algorithm

Database Locking Management Research Paper, CSC535 Advanced Database Systems, SCSU, Spring 2013.

- Analyzed architecture of locking management and schedulers
- Scrutinize locking management in Oracle

Gymnastics Data-Gathering Android Application, Group project using Azure SQL database and Android, CSC530 Advanced Software Engineering, SCSU, Fall 2013.
- Set up SQL database on Azure platform
- Developed Android application that connects and queries Azure database using Windows Azure Mobile services

Android Application development, Educational and Game Development for Android in Java, Spring 2012 to Summer 2013.
- Published children's Arabic Alphabet app, Connected Arabic Words, for Android in Google Play
- Developed and published Medieval Dodgeball and Ghost Busters to Google Play
- Integrated TapForTap, an advertising SDK, into apps

- Used AndEngine, an open source OpenGL 2D game engine

Artificial Intelligence, Handwritten Recognition using Neural Networks in Java, CSC 481 Artificial Intelligence and CSC400 Computer Science Seminar, Fall 2011.
- Designed neural network for handwritten recognition capability
- Programmed Java GUI that allows user to draw a letter and train a neural network to recognize that letter.
- Implemented Back-propagation algorithm to train the neural network

Alumni Website, Group project using PHP, WAMP, and mySQL, CSC330 Software Engineering, SCSU, Spring 2011.
- Developed using SCRUM development process
- Wrote the security module

Individual Weblog Analysis Research, MS Access database, CSC335 Database Management System Design, SCSU, Fall 2010.
- Collected weblog information into the database using MS Access.
- Analyzed the weblog to predict the customer behavior

Pac-Man Game, Java Applet version of Pac-Man game, Summer 2010

- Designed multi-threaded game loop, including sound and animation
- Dealt with Java 2D API and GUI
- Used A* Path Algorithm for game intelligence

Robotics Programming, LEGO Robot Mindstorms NXT Programming, University of New Haven, Summer 2009.

- GUI programming with NXT-G to the NXT Intelligent Brick Piece
- Programmed robot with NXC (Not eXactly C) language