<table>
<thead>
<tr>
<th>Name of Faculty Member: George Chang</th>
<th>Date: 1/21/2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department: Computer Science</td>
<td>Telephone Extension: 73797</td>
</tr>
<tr>
<td>Position or Title: Professor/Chairperson</td>
<td>E-mail: <a href="mailto:gchang@kean.edu">gchang@kean.edu</a></td>
</tr>
<tr>
<td>Name of Student 1: Hanan Teleb</td>
<td>Date: 1/21/2010</td>
</tr>
<tr>
<td>Telephone (Home): 973-849-6660</td>
<td>Cell: 908-523-8386</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:hanan_ebraheem@yahoo.com">hanan_ebraheem@yahoo.com</a></td>
<td>GPA: 3.90</td>
</tr>
<tr>
<td>Class Level (Senior/Junior, etc.): Graduate Student</td>
<td>Credits Taken: 18</td>
</tr>
<tr>
<td>Name of Student 2: Gonzalo Gutierrez</td>
<td>Date: 1/21/2010</td>
</tr>
<tr>
<td>Telephone (Home): 908-358-9646</td>
<td>Cell: 908-358-9646</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:gonan83@hotmail.com">gonan83@hotmail.com</a></td>
<td>GPA: 3.5</td>
</tr>
<tr>
<td>Class Level (Senior/Junior, etc.): Senior</td>
<td>Credits Taken: 124</td>
</tr>
<tr>
<td>Name of Student 3:</td>
<td>Date:</td>
</tr>
<tr>
<td>Telephone (Home):</td>
<td>Cell:</td>
</tr>
<tr>
<td>E-mail:</td>
<td></td>
</tr>
<tr>
<td>Class Level (Senior/Junior, etc.):</td>
<td>GPA:</td>
</tr>
<tr>
<td>Credits Taken:</td>
<td></td>
</tr>
</tbody>
</table>

Title of Project for which Support is Needed: Human-Computer Interaction in Virtual and Augmented Realities

Abstract of Project (In less than 50 words):
This system research proposal seeks support to design, develop and integrate data glove and computer vision algorithms into virtual and augmented reality environments. Data glove with internally embedded bending sensors and 3-axes accelerometer will be integrated into virtual and augmented reality systems. Computer vision techniques will be surveyed and developed to support real time object tracking in augmented reality environment.

** Faculty seeks no compensation working with these students. No budget is requested except for the students’ stipends. **

Questions to be Answered in Students Narratives (SEE NEXT PAGE)

Kindly structure your narrative on the following pages using the following sub-headings, please remember to keep it to 1,000 words or less. (The specified area will expand automatically with narrative).

a. Academic Program - Major(s) and Minor(s)

b. History - A list of past research activities related to your academic program in which you have engaged

c. Prospects - How do you anticipate this project will benefit you?

Questions to be Answered in Joint Project Narrative by Student(s) & Faculty (SEE NEXT PAGE)
Kindly structure the narrative on the following pages using the following sub-headings, please remember to keep it to 1,500 words or less.

- Context - How the project relates to important issues in your discipline
- Scope and Impact - Describe the project and how it will benefit Kean, the students and the larger discipline
- Goals and Methods - List the goals to be achieved and the methods used to achieve them
- Timeline - When the project started/will start and when it will be completed
- Plans for Dissemination - What types of publications/presentations will this work lead to and in what venues (please provide a tentative list)
- Detailed Budget with Justifications

Questions to be Answered in Faculty Narrative (SEE NEXT PAGE)

Kindly structure the narrative on the following pages using the following sub-headings, please remember to keep it to 1,500 words or less. This limit does not apply to the list of past research activities (sub-heading ‘c’).

- Faculty Prospects - How will this benefit you in your academic career and research agenda
- Level of Interaction - How much interaction you anticipate with your students during the course of the project (be explicit)
- Describe what the students will specifically be doing during this research activity.
- Assess the students’ ability to perform the tasks needed.
- List of Peer Reviewed Research Publications/Presentations in the Last Two Years. (format: title, author(s), journal or venue, volume, page, date, etc.)
- If you received a previous SpF award, please summarize the goals of that project and how they were met, and list in detail presentations/publications/exhibits/contributions that resulted from the award.

Endorsements

We commit to working together for at least 6 weeks starting June 11th, 2008 and to continue our research during the following academic year. We promise to submit a progress report to ORSP by August 31st, 2008.

Signature of Student 1: Date: format MM/DD/YYYY
Signature of Student 2: Date: format MM/DD/YYYY
Signature of Student 3: Date: format MM/DD/YYYY
Signature of Faculty Member: Date: format MM/DD/YYYY

NOTE: Please mail a signed hardcopy of this application to ORSP IN ADDITION TO the electronic submission made to orsp@kean.edu with the subject line “SpF Program.”
NARRATIVE BY STUDENT 1 (Hanan Teleb)

**Academic Program - Major(s) and Minor(s)**

My name is Hanan Teleb. I am doing the Master in Computing and Mathematics with Computer Science major at Kean University since spring 2009. I maintained high GPA since I joined Kean University as a graduate student. Currently I earned 18 credits within one year as a full time student with GPA 3.90. I should complete a total of 33 Credits by the end of fall semester 2010. I joined some of active clubs within Kean community; one of important clubs was ACM. As I am an active member in this club and one of good activities I did within it was participating in the Programming contest held in Hofstra University on Oct, 2009.

**History - A list of past research activities related to your academic program in which you have engaged**

I’m fortunate student to get the opportunity to participate in summer research projects in 2009 as a volunteer not as a SpF student researcher because I met Dr. Chang after his application for SpF was submitted. I was given the chance to work in one of innovative and interesting projects, which was “Data Glove Interface for a Virtual Reality Environment”. The goal of this project is to get the data gloves completely interact with 3-D and virtual reality environment. I worked in this project with help of my Mentor, Dr. George Chang. This project, which I’m still working on involves C++ programming.

**Prospects - How do you anticipate this project will benefit you?**

I am interested in working in real projects and research. I always believe that working in hands on actual projects is a great opportunity to let me learn and gain experience. Working in real projects help me to apply my technical and presentation skills I gained through my study. I am looking forward to work on creative challenges in this research that will be added value to my skills.

NARRATIVE BY STUDENT 2 (Gonzalo Gutierrez)

**Academic Program - Major(s) and Minor(s)**

My name is Gonzalo Gutierrez, I am a undergraduate student a Kean University. My major is Computer Science; I am a senior student with 124 credits completed with a cumulative GPA of 3.5. I am currently enrolled full time and I expected to graduate in Fall of 2010. I am a member of the IEEE club at Kean University.
History - A list of past research activities related to your academic program in which you have engaged

I have not been part of research in the computer science field. I have had different class at Kean University that has give me knowledge in different fields in Computer Science. Listed are some of the classes and projects done.

- Database Management Systems – Design, create and manipulate a database using MySQL; also create a link between database and java using JDBC.
- Digital Circuit & Systems – Analyze and design digital circuit implementing logic gates (AND, OR, NOT, NAND, NOR, XOR).
- Software Engineering – Study all the phase of a software project from requirements, development and quality assurance.
- Data Structures and Algorithms – Using JAVA develop a Link List, Stack and Queue.

Prospects - How do you anticipate this project will benefit you?

I always been really interested in technology and this research will give me a hand on experience. Also I am planning to apply for graduate school and this research will be a great opportunity to develop my skills learned throughout my undergraduate courses.

Previous SPF Award(s) and Research Results

SPF2009 Project Title: Interactive Visualization System
Student Researchers:
  Ibtisam Ali (senior)
  Swetha Medicherla (senior)

Paper Accepted for Publication and Presentation:

SPF2008 Project Title: Web Mining in Web 2.0
Student Researchers:
  Elizabeth Torres
  Avani Patel

The team built a system that can automatically look for information on www.flickr.com using Web 2.0 technologies. The students are working on the interface portion of the project in their senior seminar class. The system should be ready by the end of the semester.

SPF2007 Project Title: PDA and Web-based Interfaces to Parallel Computer
Student Researchers:
The entire team was invited to attend SC07 conference in November 10-16, 2007. SC07 is the International Conference for High Performance Computing, Networking, Storage and Analysis.

SPF2005 Project Title:
  Parallel Tree Matching for Scientific Pattern Matching Problems
Student Researchers:
  Tarik Guelzim (first employment: Junior network administrator / Monmouth University, Just passed the interview at Google Inc.)
  Felipe Buenano (first employment: SWMX SoftWave Media Exchange Inc.)
  Raul Mosquera (first employment: Exigis Inc.)

Students Poster Presentations at the 21st Annual Eastern Consortium for Computing Sciences Conference, October 14-15, 2005:
  • Title: Preliminary Results on Parallel Tree Matching, Student Researchers: Raul Mosquera and Felipe Buenano.
  • Title: RSS Search Engine, Student Researcher: Tarik Guelzim.

SPF2004 Project Title:
  The Design and Analysis of a Web-based Large Scientific Image Retrieval System
Student Researcher:
  Pedro Calixto (first employment: Exigis Inc.)

Paper Accepted for Publication and Presentation:

Testimonials:

I work at Exigis (www.exigis.com), a Manhattan based company, doing what I love the most: software development. My main responsibilities include the development of new products and continuing upgrade and maintenance of current ones. I am proud to say that I am part of a team building innovative solutions for the biggest companies in the world including defense contractors, financial institutions, retailers and more. Working at Exigis requires an in depth knowledge of web technologies and being able to manage projects with short deadlines.

After two years of working as a software developer, I look back to the time when I was hired and I ask myself a question. Why was I hired? The answer is simple. It is because I had the experience to show that I am a skilled programmer with the ability to work as part of a team and with a strong motivation to pursue my
goals. Participating in the SPF with Dr. Chang gave me not only the opportunity to practice the theoretical knowledge learnt at the classroom but it opened a door full of opportunities that otherwise would have not come.

Pedro Calixto
pcalixto@gmail.com

Name: Tarik Guelzim
Email: guelzimir@gmail.com
First Employment: Siemens Corporate Research
Impact of SPF on my career:
The student partnership with faculty was a valuable experience throughout which I was able to take the conceptual material I learned in the courses I have taken and apply it to solve real life problems. The SPF program pushed me to enjoy research and certainly improved my methodologies and techniques when tackling a big technical problem at my job. It also made me aware of how worthwhile R&D is, and how it is valuable in keeping me up to date with the ever evolving IT field.

To Whom It May Concern:

I believe that the most important experience on my college career was the Student Partnering with Faculty Summer Research Program at Kean University. When Dr. Chang asked me if I would be available to assist him on a research project that he was planning on, it came to me as a reward for all the hard-work and study hours I had put on all of my courses. To me, it was a privilege to be chosen within very few students on campus for such a colossal task. It was my opportunity to finally put on test all of my programming knowledge on an out-of-the-classroom, “real life” situation.

I believe that this experience completely shaped my career as a developer. Its rewards are priceless. This program did not only enhanced my abilities as a programmer, but also helped me improve my team-working skills. It set examples of what to expect from employers and how my future working environment would be like. Besides these skills, it also helped me evaluate my own pace as a programmer but most importantly, it helped me to be taken as someone who is ahead of the class, ready to accept any challenges, and able to quickly learn different alternatives of programming. This former aspect is what got me my current job as a developer.

Furthermore, my experience as a Student Partnering with Faculty Summer Research Program scholar is far more rewarding that what I have expected. It gave me the opportunity to work with the best professor and best peers on campus. It provided me with skills and experience which are unique and very valuable in the job market. It finally opened my mind into a new direction and my career into a job.

Sincerely,
Felipe S. Buenano
fcsnebu@gmail.com
JOINT PROJECT NARRATIVE BY FACULTY MEMBER AND STUDENT(S)

Context - How the project relates to important issues in your discipline

What is virtual reality? “Virtual reality (VR) is a term for a computer-simulated environment, whether that environment is a simulation of the real world or an imaginary world” [1]. Augmented reality (AR) is a term for a live direct or indirect view of a physical real-world environment whose elements are merged with (or augmented by) virtual computer generated imagery [2]. Why is combining real and virtual objects in 3D useful? Virtual and augmented realities enhance a user’s perception through the interaction with the computer generated or altered world [3].

What is computer vision? Computer vision is the science and technology of extracting information from images [4]. The source of image data can be video sequences, photos, etc. Applications for computer vision include medical image analysis, manufacturing process support, missile guidance systems, and autonomous vehicles. Typical computations of computer vision include object recognition, identification, and tracking.

What is a data glove? A data glove is one of input devices that have a big variety of uses. Data glove is used to provide hand gestures as mean of Human-Computer Interactions (i.e. “fist”, “index finger”, “hand movements tracking”). It can be used in many educational and industrial applications. Students in Kean community can use this data glove in graphics classes and other related classes. Also one of useful uses for Data gloves is emulating mouse and keyboard functionalities so it can help students who have disabilities.

The proposed research is about how to use data gloves to interact with 3D objects in virtual and augmented environments. The research idea is one of innovative ideas about Human Computer Interaction. Image tracking in the virtual word will also be researched and implemented. The main goals of this project are 1) study the current state-of-the-art human computer interaction systems; 2) design and implement data glove interaction with virtual systems; and 3) design and implement image tracking algorithms.

Scope and Impact - Describe the project and how it will benefit Kean, the students and the larger discipline

Two undergraduate students will be participating in the summer 2010 research. The project will benefit the students in many ways: 1) get a chance to conduct system-oriented research, 2) work closely with a faculty on a specific research project, 3) have access to state-of-the-art software and computing facilities, 4) broadening their career prospects, and 5) contribute in scientific research.
The overall goal of the proposed project is to 1) research the current state-of-the-art human computer interaction systems; 2) design and implement data glove interaction with virtual system; 3) design and implement image tracking algorithms; 4) be able to demonstrate the prototype built in front of a classroom setting. It is my intention to report the research results, design and implementation of this system at presentation or exhibits at international conferences, which will enhance the image of our university as being active in academic research. Furthermore, methods used in this project will be integrated into a new course: Tech 3640 Virtual and Augmented Realities

Goals and Methods - List the goals to be achieved and the methods used to achieve them

The research project will start in the summer of 2010 with two undergraduate students’ involvement. The timeline of my activities is list below:

Summer 2010:
- Research, design and develop ways to use data glove to interact with virtual and augmented realities.
- Research OpenCV, a computer vision software toolkit, for virtual and augmented realities.
- Preliminary reports write up.

Fall 2010:
- Enhance the prototype system.
- Prepare manuscripts for publication.

Spring 2011:
- Final report write up and presentations.

This project will follow the traditional system-oriented computer science research life cycle – Requirements, Design, Implementation, Optimization, Testing and Usability Analysis.

Following list is the specifics on the methods to be used in each phase of the project to achieve my goal:

- System setup – system from SpF2009 will be used.
- Visualization implementation – C++/C# programming language using Microsoft Visual Studio.
- User interface design and implementation – using Wii Remote and Data Glove’s Application Programming Interface (API).

<table>
<thead>
<tr>
<th>Week</th>
<th>Date (phase)</th>
<th>Weekly Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/24 (setup)</td>
<td>• Data glove integration with 3D software.</td>
</tr>
</tbody>
</table>
Timeline - When the project started/will start and when it will be completed

The project will start in June and will be completed in December, with 10 weeks of research during the summer. 80% of the research will be conducted during the summer. Faculty and student researchers will work as a team 7 hours per day and 4 days per week from Late May to August for more than 10 weeks. Both participants will be working in the lab on campus 4 days per week (Mon, Tu, Wed. and Th.). The remaining 20 percent of the research will be conducted in the fall semester. 6 hours of work per week is expected from both participants in the fall.

Plans for Dissemination - What types of publications/presentations will this work lead to and in what venues (please provide a tentative list)

The research results of this system-oriented project will be submitted to one international conference or journal such as the following:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/31</td>
<td>Research on papervision 3D library begins.</td>
</tr>
<tr>
<td></td>
<td>Research on OpenCV library begins.</td>
</tr>
<tr>
<td>6/7</td>
<td>Design and implementation begins.</td>
</tr>
<tr>
<td>6/14</td>
<td>Design and implementation continues.</td>
</tr>
<tr>
<td>6/21</td>
<td>Design and implementation continues.</td>
</tr>
<tr>
<td>6/28</td>
<td>implementation</td>
</tr>
<tr>
<td>7/5</td>
<td>implementation</td>
</tr>
<tr>
<td>7/12</td>
<td>system testing</td>
</tr>
<tr>
<td>7/19</td>
<td>system testing</td>
</tr>
<tr>
<td>7/26</td>
<td>system integration</td>
</tr>
<tr>
<td>8/2</td>
<td>system integration</td>
</tr>
<tr>
<td>8/9</td>
<td>Report write up</td>
</tr>
<tr>
<td>9/6-10/25</td>
<td>system update and analysis</td>
</tr>
<tr>
<td>11/1-12/15</td>
<td>wrap-up</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<td>system update and analysis</td>
</tr>
<tr>
<td>11/1-12/15</td>
<td>wrap-up</td>
</tr>
</tbody>
</table>
Students are expected to submit research results to ACM student magazine for publication. The developed software components/system will be made available to the scientific research community via my webpage. Research results will also be presented at the 2008 Faculty Research Forum and Computer Science colloquium.

Detailed Budget with Justifications

No hardware or software budget is requested for this project. All hardware and software are already available.

NARRATIVE BY FACULTY MEMBER

Faculty Prospects - How will this benefit you in your academic career and research agenda

My professional development will be advanced because I will be able to 1) have students participate and accelerate my research, 2) advance system research and methods, 3) share discovered computing methods with scientific community, and 4) have a track record of research results to apply for external funding from the NSF.

Furthermore, the result of my research will lead to a scientific paper presentation or exhibits at international conferences which will enhance the image of Kean as being active in academic research.

Level of Interaction - How much interaction you anticipate with your student(s) during the course of the project (be explicit)

The student researchers will be supervised by the faculty throughout out the entire project. More specifically, faculty and student researcher will work as a team 7 hours per day and 4 days per week from late May to August for more than 10 weeks. All participants will be working in the lab on campus 4 days per week (Mon., Tu., Wed., and Th.). The remaining research will be conducted in the fall semester. 6 hours of research per week is expected from all participants in the fall (see Timeline section). Phone, E-mail (Gmail) and IM (Gtalk) will be the communication channels when participants are not meeting on campus.
Describe what the student(s) will specifically be doing during this research activity.

The student-faculty team will collaborate in a very aggressive schedule outlined in the timeline section. Students will participate in all phases of this system-oriented computer science research. The specifics of what students will participate in the project include:

- Requirements – Student researchers will participate in the requirement analysis.
- Design – Using UML to design the system.
- Implementation – Using Java and C# programming language and Eclipse and Visual Studio development tools to build the system.
- Testing

Assess the students’ ability to perform the tasks needed.

The project has a very aggressive schedule. Weekly milestones are explicitly outlined in the timeline section. Students’ performance will be evaluated based on the effectiveness of the following criteria:

- Knowledge – Do the students develop and apply the knowledge and skills needed?
- Understanding – Do the students show a clear grasp of the problems?
- Organization – Do the students present a well planned and organized execution?
- Excellence – Do the students turn in high quality work?
- Responsibility – Do the students ensure the timeliness of the given tasks?
- Communication – Do the students express relevant and appropriate knowledge and information?

List of Peer Reviewed Research Publications/Presentations in the Last Two Years. (format: title, author(s), journal or venue, volume, page, date, etc.)

Please visit my homepage at http://www.kean.edu/~gchang/ for a full list of honors, publications, and exhibits.

Peer Reviewed Publications in the Past 2 years:


References:


## Qualifications

George Chang, Ph.D.  
gchang@kean.edu  
http://www.kean.edu/~gchang/  
Kean University  
Department of Computer Science  
(Office) 908-737-3797

### Professional Experiences:

<table>
<thead>
<tr>
<th>Date</th>
<th>Position</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/08 - present</td>
<td>Chairperson</td>
<td>Kean University, Department of Computer Science, Union, N.J.</td>
</tr>
<tr>
<td>09/09 - present</td>
<td>Professor</td>
<td>Kean University, Computer Science Dept., Union, N.J.</td>
</tr>
<tr>
<td>09/05 – 08/09</td>
<td>Associate Professor</td>
<td>Kean University, Department of Computer Science, Union, N.J.</td>
</tr>
<tr>
<td>07/07 - 06/08</td>
<td>Coordinator</td>
<td>Telecomm and Information Technology Program.</td>
</tr>
<tr>
<td>09/99 - 06/05</td>
<td>Assistant Professor</td>
<td>Kean University, Department of Math. and Computer Science, Union, N.J.</td>
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<tr>
<td></td>
<td></td>
<td>• Conducting research and software development in Data Mining, Databases and Bioinformatics.</td>
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<tr>
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<td>• Awarded NSF DUE: Project ASK: Applying Student Knowledge for Success in Computer Science, with P. Morreale, Proposal No. 0804664, $584,875.00, 2008-2013.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Awarded NSF MRI: Acquisition of Computing Equipment to Enhance Computational Science Research at Kean University, with D. Joiner, Proposal No. 0722790, $447,332.00, 2007-2009.</td>
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<tr>
<td></td>
<td></td>
<td>• Chair of the Computational Science Group and Director of High-Performance Computational Laboratory (<a href="http://csg.kean.edu">http://csg.kean.edu</a>).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inducted into The Honor Society of Phi Kappa Phi (<a href="http://www.phikappaphi.org">www.phikappaphi.org</a>) in January 2003.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Coaching Kean’s programming teams for the ACM Regional Programming Contest 2000-2003.</td>
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<tr>
<td></td>
<td></td>
<td>• Teaching both graduate and undergraduate courses in Databases, Data Structures and Programming Techniques in Java and C++, and Special Topics.</td>
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<td>• New courses developed:</td>
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<tr>
<td></td>
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<td>▪ Graduate: Web Database Programming (PHP/Perl/Servlet/JSP/JDBC/MySQL)</td>
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<td>▪ Graduate: Knowledge Discovery and Data Mining</td>
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<td>▪ Graduate: Principles of Informatics: Algorithms and Tools</td>
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<td></td>
<td></td>
<td>▪ Graduate: Enterprise Software Development (J2EE/EJB/XML)</td>
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<td>▪ Graduate: Component Software Design and Design Patterns</td>
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<tr>
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<td></td>
<td>▪ Graduate: High-Performance Computing</td>
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<tr>
<td></td>
<td></td>
<td>▪ Undergrad: New Media Programming I</td>
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<tr>
<td></td>
<td></td>
<td>▪ Undergrad: New Media Programming II</td>
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<tr>
<td></td>
<td></td>
<td>▪ Undergrad: Database System Concepts and Applications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Undergrad: Foundations of Information Technology</td>
</tr>
<tr>
<td>09/06 - 06/07</td>
<td>Software Engineering Consultant</td>
<td>MobileAware Inc. Cranbury, N.J.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Designed, implemented and maintained Automated Build Procedure for all products.</td>
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<tr>
<td>5/00 - 10/01</td>
<td>Mobile/Wireless Computing Consultant</td>
<td>Mobilocity, Inc. New York, N.Y.</td>
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<td></td>
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<td>• Designed and Implemented Voice Application Framework using Java Design Patterns.</td>
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<td></td>
<td>• Implemented Voice Alert System for Bookspan.</td>
</tr>
</tbody>
</table>
### Education:

**Ph.D. in Computer and Information Science**
New Jersey Institute of Technology, Newark, N.J.
Dissertation Title: WAQS: A Web-based Approximate Querying System.

**Master of Science in Computer and Information Science**
New Jersey Institute of Technology, Newark, N.J.

**Bachelor of Science in Computer Science**
State University of New York at Stony Brook, Stony Brook, N.Y.

**Bachelor of Science in Applied Mathematics and Statistics**
State University of New York at Stony Brook, Stony Brook, N.Y.

### Computer Skills:

**Certification:** Redhat Certified Engineer. Certification No:806099024200311

**Language/Tool:** C/C++, Java/JSP/EJB, Perl, PHP, Tcl/Tk, SQL, bash, Lex/Yacc, LISP, Pascal, sed/awk, BASIC, XML/HTML/WML/VoiceXML, ASM 80x86, MC680x0, CVS/RCS.

**Hardware:** PC, Mac, SUN Sparc, Fujitsu AP1000 Multiprocessor, VAX, SBC88, HP 300 PC with HP 5890A Gas Chromatography and HP 5970 Series Mass Spectrometry.

**Operating System:** Linux, Solaris, MS Windows, MacOS.

**Database System:** Oracle, MySQL, PostgreSQL.

### Authored Book:


### Paper Publications:


Research Interests:

BioInformatics Systems, Data/Web Mining, Databases, Information Retrieval and High-Performance Computing.

References:

Available upon request.
Hanan Teleb
12 Herpers St
Irvington, NJ 07111.
(908) 523-8386.
telebh@kean.edu

Career objective:
I intend to establish myself as Researcher through contributing to summer research projects. I believe that my technical, functional and communication skills will enable me in facing the challenging career ahead.

Education:

[Jan 2011]
M.S. Computing, Mathematics, and Statistics, with specialization in Computer Science, Kean University.

[Jul 2007]
Diploma, Software Skills Development Program, Information Technology Institute (ITI 9-Month Program) Giza, Egypt.

Worked as a developer in project “Registration and examination System for information technology institute (ITI)” which was online registration for applicants who apply for the information technology institute and preparing the exam for them, using Asp.net, c#.net, visual studio.net 2005, SQL server 2005

[May 2006]
B.S. Computer Science, Faculty of Computers and Information, Helwan University, Egypt. Graduated with high honors, Certified and Evaluated by WES (World Education Services in 2007)

Graduation project :
Name: Automatic Detection of Renal Rejection after Kidney Transplantation.
Idea: It is a medical software program for early detection of kidney rejection after kidney transplantation
Tools and Technologies: Java (Borland JBuilder X Enterprise and Borland JBuilder 2005), ImageJ, Matlab 7.0 (for testing some functions).
Grade: Excellent.

Work Experience:

[Feb 2009 – Till present]
Computer labs, Willis Hall, College of Business and Public Administration, Kean University, NJ 07083
Graduate assistant; Work in Computer labs, help students, and work as web designer.

[Jun 2009 – August 2009]
Kean University, Computer Science Department
Researcher; worked as a volunteer in the summer research projects about virtual reality, and Using Data Gloves to interact with games.
Arcom (Saudi Arabian Company), Cairo, Egypt.

**Technical skills :**

**Programming Language:**

**Web Technologies:**
- ASP.Net, ADO.NET, XML & Allied Technology/XSL, HTML & DHTML, XML web services, Java Script, Macromedia Flash 5, Dreamweaver4.0, FrontPage, and Web Services Administration (IIS).

**Graphics Programming:**
- DirectX9.

**Modeling Technologies:**
- ERD, DFD, OO Analysis & Design UML

**Case Tools:**
- Microsoft Visio.

**RAD Tool and IDEs:**

**DBMS:**

**Operating systems:**
- Windows 9x, 2003, XP, NT, UNIX, Linux (red hat 9.0).

**Productivity Suites:**

**Awards:**
- Third Place in the Technology Entrepreneurship Society Challenge in the Idea to Product Global Competition (I2P® Global), November 2006 held at the University of Texas at Austin, USA representing Helwan University.
- First Place in the Idea to Product Local Competition (I2P® Egypt), October 2006.
- One of the Twenty Nine Winners of the 1st Round in Business Plan Competition, Cairo, Egypt, July 2006.
- The third place locally in the Imagine Cup 2007, representing the Information Technology Institute (ITI), Cairo, Egypt.

**Personal skills:**
Interactive and fast to learn enough new technologies, have presentation skills, Work effectively with people at all levels and Ability to work in a group or individually.

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<th>Activities:</th>
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| Hobbies: Traveling and Reading general topics related to computer and medicine, Sport: Walking. |

<table>
<thead>
<tr>
<th>Languages:</th>
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| Arabic: Fluent, English: Very Good reading & writing, good speaking, and French: Good reading |

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<th>References:</th>
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References Furnished Upon Request.
Gonzalo A. Gutierrez
118 Gales Drive Apt 2
New Providence NJ 07974
(908) 358-9646 gonan83@hotmail.com

OBJECTIVE
To obtain a challenging position in research in the computer science field that will allow me to use the skills and knowledge acquired through my educational career.

EXPERIENCE
(2001 to present)
New Providence Fuel, New Providence, NJ
Auto Repair Technician/Mechanic/Technical Support
• Responsible for evaluating and determining source of mechanical, electrical, or technical problems in motorized vehicles, and propose innovative and accurate solutions.
• Supervise in-house and small individual accounts keeping record of monetary transactions by maintaining an updated database.
• Handle and process invoices to ensure proper account maintenance and timely payments.
• Assist store/shop manager performing a variety of administrative, technical and clerical duties to ensure effective and efficient shop operations.

EDUCATION
Kean University, Union, NJ (2001-2003 undergraduate)
B.S. in Computer Science
Major GPA: 3.72/4.00
Compucar System Plus, Colombia (1998-1999 Certificate)
Integrated Systems Technician/Technical Support

RELATED COURSES
• Digital Circuits
• Telecommunications
• Computer drafting
• Database Management Systems

QUALIFICATIONS
• Proficient handling computer software and hardware.
• Skillful in maintaining focus and proposing creative ideas.
• Bilingual, fluent in English and Spanish.
• Hard working, reliable, able to work under pressure.
• Fast learner: quickly incorporate and implement new procedures.
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<tr>
<th>COMPUTER SKILLS</th>
<th>MySQL, JAVA, AutoCAD, Microsoft Office (Word, Excel, Access, PowerPoint, Photoshop), C++ knowledge</th>
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<tbody>
<tr>
<td>REFERENCES:</td>
<td>Available upon request</td>
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