

Anis Zaman

Bard College, 30 Campus Road, Annandale-on-Hudson, NY 12504
Email: az9554@bard.edu, Phone: 626-298-1861

Education

- Bard College *Expected in May 2013*
- Bachelor of Arts in Computer Science; GPA: 3.81/4.0

Work Experience

- **Software Engineer Intern at KAYAK Software Corporation** *May 2012—Aug 2012*
Worked as a Software Engineer on multiple projects such as, personalized search results, flight accuracy and software maintenance.
- **Academic Tutor at Bard Academic Resource Center, Bard College** *May 2010—Present*
Dedicated tutor for all computer science classes
Tutoring 'Pre-calculus', 'Calculus- II', 'Differential Equation and 'Linear Algebra' classes
- **Research Assistant at Cognitive Systems Lab, Bard College** *Aug 2012— Dec 2013*
Worked on a project to derive accurate English phrase-level alignments for the basis for training a machine translation system that translates complex to simplified text.
- **Research Assistant at Drab Lab, Bard College** *May 2010— Present*
Worked on multiple mixed-reality interaction, human robot interaction projects, using mobile robot and projector-camera systems.
- **Computer Technician and Lab Monitor, Bard College** *Aug 2009— Present*
Install and maintain Computer Hardware, Software and Networks

Technical Skills

- **High level languages:** Java, C, Mathematica, Prolog, SML
- **Development tools:** Velocity's Model View Controller, Eclipse
- **Scripting language:** Python, SQL, JavaScript, Bash, Html, XPath, PHP
- **Operating System:** Windows, Linux, Mac OS
- **Database:** MySQL
- **Others:** Photoshop, Flash, MS Office

Important Courses:

- **Robotics and Vision:** Object Oriented Programming with Robots, Intelligent Robotics, Computational Image, Reinforcement Learning
- **Theory:** Data Structures, Algorithms, Design of Programming Language, Theory of Computation
- **Systems:** Operating System, Databases Systems, Embedded Systems
- **Mathematics:** Calculus III, Probability, Differential Equation, Linear Algebra, Proofs and Fundamentals, Dynamical System, Discrete Mathematics, Real Analysis
- **Networking:** Distributed Systems

Publication and Presentation

- Strauss, A.; **Zaman, A.**; O'Hara, K. J. 2010. The IMP: An Intelligent Mobile Projector. *In Proceedings of the Conference of Association for the Advancement of Artificial Intelligence, Atlanta, GA.*
- Presented "The IMP: An Intelligent Mobile Projector" at the 23rd Annual Saint Joseph's University Sigma Xi Student Research Symposium—April 2012, Philadelphia, PA.

Course Projects

- **Computer Vision**

Multi-touch Surface: Using the principle of frustrated total internal reflection, blobs detection, rendering and multiple finger tracking algorithms, this is a platform that has been built using Microsoft Kinect, Infra-red LED and acrylic glass sheet. were used to interact with the surface.

- **Artificial Intelligence & Networking**

3D Maze exploration: An online 3D maze exploratory game that can be played by multiple human player/bots from remote location using TCP. The central maze map is located at a remote central server. Breadth first search algorithm and A* algorithm is implemented for exploring the maze by both human players and the bots.

Research Experience

- **Senior Thesis, Bard College** *Sep 2012–May 2013*

Project: "Sentence Similarity"—Using WorldNet, Stanford Parser, and a Graph Based Word Sense Disambiguation techniques, the goal is to extract as many English sentence pairs from two seemingly similar text in order to create a large corpus of aligned sentence pairs.

Advisor: Professor Rebecca Thomas

- **Harvard University, RoboBees Lab, Cambridge, MA** *Jun 2011–Aug 2011*

Project: "Construction of a Quad-Copter"—There are many quad copter designs out there, but none are small enough to be used as a proxy for an insect scale flying robot. The goal of the project was to build a small enough quad-copter from scratch, which could be used for flight test of robotic bees.

Advisor: Professor Greg Morrisett and Jason Waterman

- **Bard Summer Research Institute Fellow, Bard College** *Jun 2010–May 2011*

Project: "The IMP: An Intelligent Mobile Projector"—A platform for mixed-reality interaction, human robot interaction, using a mobile robot and projector-camera system.

Advisor: Professor Keith O'Hara, Drab Lab

Leadership and other Activities

- Residential Adviser (RA) at Bard College
- Co-Founder of Robotics Club at Bard College
- Teach python programming to high school students at Red Public Hook Library at NY

Honors/Awards

- Distinguished Scientist Scholarship, Bard College *Aug 2009–present*
- Research Experiences for Undergraduates Award, Harvard University *Jun 2011–Aug 2011*
- Bard Summer Research Institute Fellowship, Bard College *Jun 2010–May 2011*

Current Visa Status: F-1, student visa