

## Education

**M.S. Computer Science**, University of Massachusetts, 2005

Thesis: The Application of Fuzzy Logic to the Construction of the Ranking Function of Information Retrieval Systems

GPA 3.9/4.0

**B.S. Computer Science**, Brigham Young University, 1999

## Publications

Rouben, N. (2005). *The Application of Fuzzy Logic to the Construction of the Ranking Function of Information Retrieval Systems*. M.S. Thesis, University of Massachusetts

Downey, A., Rouben, N., *Learning Java by Playing with Robocode*, to be published Spring 2005

## Research

Rouben, N., *DNA Sequence Alignment with the use of Reinforcement Learning*

Rouben, N., *Detecting Network Intrusion with the use of Belief Networks*

Rouben, N., *Application of Fuzzy Logic to the refinement of an answer set of Information Retrieval systems*

## Honors

Outstanding Student Award: Computer Info. Systems (1996, 1997), Physics (1997)

## Major Projects

*DMV Renewal Express*

Software Engineer primary responsible for project

Project received 2001 Governor's CIO Award

Annual revenue in excess of 10 Million US Dollars

*Payment Processing Framework*

Software Engineer primary responsible for project

Annual revenue over 20 Million US Dollars

*Web Shopping Cart*

Software Engineer primary responsible for project

Used by several State governments

*Corel Word Perfect / Perfect Expert Module*

Software Engineer primary responsible for maintaining and developing new modules

*E Bill Generation / CTS/Bell*

Software Engineer primary responsible for project

Implemented new core process that speeded up generation process by 10x and increased stability

### *Current Projects*

Application of Artificial Intelligence and Information Retrieval to Financial Analysis  
Enhancing precision of Apache Lucene search engine with the use of Fuzzy Logic

## **Professional Experience**

05/03 - present **Senior Software Engineer**, Fincross

- ◆ Application of Artificial Intelligence and Information Retrieval to Financial Analysis (Matlab, Java, C++)

12/01 - 04/03 **Software Engineer**, CTS / Bell

- ◆ Development of E Bill Generation Software (Java)
- ◆ Developed new core process that increased speed 10x and increased stability
- ◆ Developed module for communication with FedEx Server
- ◆ Assisted in setting up Source Control, Development, Testing, Database Design Frameworks
- ◆ Supervised number of projects

01/00 - 09/01 **Software Engineer**, NIC

- ◆ Primarily responsible for the development of: Payment Processing Framework, Shopping Cart, Vehicle License Renewal, etc. (using J2EE)
- ◆ Design and Development of Java server side applications
- ◆ Application Requirements gathering and review
- ◆ Application maintenance and support

05/99 - 01/00 **Software Engineer**, Experior / ETS

- ◆ Design and Development of applications in Java, C++ and VB accessing Oracle DB
- ◆ Enhancement of Database Engine (in C++) accessing Oracle DB
- ◆ Report Generation using Crystal Report Designer and SQL Designer
- ◆ Statistical Analysis

09/98 - 05/99 **Research Assistant**, Brigham Young University (funded by Nissan)

- ◆ R&D of neuro fuzzy logic simulator for Accumulative Cruise Control in Java, Matlab
- ◆ Data processing and manipulation
- ◆ Application optimization

04/98 - 09/98 **Software Engineer**, Corel

- ◆ Creating User Interfaces in Visual C++
- ◆ Writing modules in Visual C++ and proprietary macro language
- ◆ Participated in resolving issues in migration from Corel Suite 8 to Suite 9

08/96 - 05/97 **Lab Supervisor**, Frank Phillips College

- ◆ Win NT and Novell server maintenance
- ◆ Supervising Lab personnel
- ◆ Evaluating hardware and software vendors

01/95 - 08/96 **Lab Technician**, Frank Phillips College

- ◆ Hardware and software installation and trouble shooting
- ◆ Training and assisting students in using various software packages

## **References**

Available upon request