

NEEL KISHAN

OBJECTIVE

Develop and optimize automated vision algorithms utilizing parallel hardware and software.

CURRENT POSITION

Reveal Imaging Technologies

Bedford, Massachusetts
May 2009 — present

Junior Scientist

- Assist in the development of an automated personnel inspection system
- Collect broadband active MMW sensor data, broadband acoustic data, and IR data
- Analyze data using signal processing and image processing techniques
- Integrate 3D surface scanning based on time-of-flight and structured light approaches
- Implement optimizations in existing research code base in Matlab, CUDA, and C
- Present internal and contract research to company and customers

EDUCATION

Boston University

Boston, Massachusetts
September 2007 — September 2009
GPA: 3.6/4.0

M.A., Cognitive and Neural Systems

Dean's Fellowship, 2007-2008

Relevant Coursework:

- Comparative Analysis of Learning Systems
- Neural and Computational Models of Vision
- Neural and Computational Models of Recognition, Memory, and Attention

Rice University

Houston, Texas
September 2003 — May 2007
GPA: 3.3/4.0

B.S., Bioengineering and B.A., Cognitive Sciences

Relevant Coursework:

- Computational Modeling of Cognitive Processes
- Numerical Methods and Statistics

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TECHNICAL SKILLS

- Programming Languages: MATLAB, C, CUDA, LabView
- Office Suite Software: MS Word, MS Excel, MS Powerpoint
- Operating systems: MS Windows, Linux, Mac OS
- Certifications: AIA Certified Vision Professional — Basic Level

RESEARCH

Boston University

Course Project on Forecasting the Exchange Traded Fund DIA

- Created mixed model predictor using genetic algorithms on kNN, SVM, and ARTMAP systems

Rice University

Student Research Assistant

- Developed MATLAB scripts to analyze anatomical and time-series data
- Improved methods for data coregistration and non-affine transformation
- Multisensory integration study published in Journal of Neuroscience

Bioengineering Senior Design Project

- Collaborated with an interdepartmental engineering team
- Produced a virtual environment with novel haptic grippers for surgical teleoperation
- Gripper interacted with a PC via a LabView FPGA Module
- Controlled haptic feedback with software developed in C++
- Virtual environment developed using CHAI 3D C++ libraries and CAD models of the gallbladder and surgical instrument

TALKS

1. Virtual Environment for Robotic Grippers in Laparoscopic Surgery *Houston Conference on Biomedical Engineering Research*, 2007
2. Haptic Grippers for Surgical Teleoperation. *Houston Conference on Biomedical Engineering Research*, 2007

POSTER PRESENTATIONS

1. Computational Modeling of the Rat Hippocampus Using the Integrate-and-Fire Model. *Rice Undergraduate Research Symposium*, 2006
2. Surface Models of the Human Cerebral Cortex from MRI. *Rice Undergraduate Research Symposium*, 2006

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PROFESSIONAL MEMBERSHIPS

- The Optical Society

2010 to present

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