Reyd Nguyen

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CLEARANCE: US SECRET

WORK & RESEARCH EXPERIENCE:

Science Systems and Solutions, Inc. – Research Assistant ***July 2016 to Present***

- Supported a senior staff member in developing and testing algorithms and code, translating signal processing software developed in Fortran into Matlab and to C/C++, analyzing synthetic and field radar data to test detection and tracking algorithms
- Under a subcontract with Lockheed, support senior staff member to develop software to detect and to track people moving under trees using foliage penetration (FOPEN) radar systems
- Supported a senior staff on a Navy Phase 1 SBIR program to develop Matlab software to perform 3-D ISAR imaging of ships from collected raw complex radar data.

RDRTec Inc. Paid internship ***June 2014 to June 2016***

- Responsible for helping RDRTec research scientists develop, implement, and test algorithms in Matlab as well as prepare Small Business Innovation Research (SBIR) proposals.
- Involved in developing and testing 6-DOF hydrodynamic code of moving vessels in Matlab and testing radar-based 3-D inverse synthetic radar imaging of moving vessels.
- A second project that I am working on involves developing and testing Constant False Alarm Rate detectors for small boats by analyzing sea clutter statistical distributions.
- ***SBIR Proposals that I helped win – December 2014***

- ***Navy Topic N141-067 Phase 2 ($500,000 Base, $250,000 Option)***: "Adaptive Radar Detection. Approaches for Low-RCS Maritime Vessels in Highly Variable Clutter Conditions" – Contract Number N00014-14-P-1146 (awarded September 2015).
- ***Navy Topic N141-018 Phase 2 ($750,000 Base, $250,000 Option)***: "Efficient 3-D Imaging for Improved Classification and Persistent Tracking" – Contract Number N68335-14-C-0263

UCSD San Diego Super Computer Center Internship ***June 2015 to June 2016***

- Working with Dr. Peter Rose in a team with 5 other students to develop a Java based software package to reduce the computational complexity required to compute Protein-to-Protein comparison based on structures represented in the PDB (protein database).
- Used a well-known manifold learning approach to reduce the dimensionality of the problem by mapping the Protein-protein matching problem into a lower dimensional manifold.

PROGRAMMING SKILLS

C/C++, Java, Matlab, SQL, R, Fortran (beginner)

EDUCATION

2016 – Present Rose-Hulman Institute of Technology
Majors: Computer Engineering/Computer Science/Mathematics (3.6/4.0)

RELEVANT COURSES TAKEN

UCSD - Probability, Stochastic Processes I & II, Complex Analysis, Applied Complex Analysis

Rose-Hulman– DC Circuits, AC Circuits, Engineering Practice, Circuit and Systems, Electronics Device Modeling, Object Oriented Software Development, Continuous Time Signals and Systems, Intro to Embedded Systems, Communications Network, Discrete-Time Signals, Software Design, High Speed Digital Design, Computer Architecture, Introduction to Database Systems, Introduction to Image Processing, Intro to Signal Processing**,** Machine Learning, Artificial Intelligence.

ACTIVITIES: Rose-Hulman Chapter of Alpha Phi Omega – member; IEEE – student member