Computing and Information Technology
Student Mini Showcase

Poster Session

Study Center, Gallery

August 1, 2013

INDIVIDUAL POSTERS

Probabilistic Computing for Graphics Processing Units (GPUs) .......................................................Stephanie Abney – Colorado State University, Fort Collins
Mentor: Laura Monroe, HPC-5

Microsoft Windows Migration Tool .................................................Nicole J. Boles — New Mexico Highlands University
Mentor: Christina De La Torre, DCS-4

Scheduling Complex Tasks to Be Performed by an Intermediary Program ........................................Josh Brashear — New Mexico Tech
Mentor: Sherry Bachicha, DCS-1

Automate and Improve Routine IT Tasks ..................................................Gerald Castañeda — Northern New Mexico College
Mentor: Rocky Herrera, DCS-4

Oracle Weblogic Scripting ................................................................. Alexander Castillo — New Mexico State University
Mentor: Tim Martinez, SAE-2

Secure VoIP on Session Border Controller ..........................................Boubacar Coulibaly – Prairie View A&M University
Mentor: Brad Brothers, NIE-ESS

Exposing LANL Image-Segmentation Capabilities to Open-Source Tools for Rapid Visualization and
Analysis ................................................................. Alexander Dunlap – University of Chicago
Mentors: Lakshman Prasad, ISR-3 and Sriram Swaminarayan, CCS-7

SEFI: A Soft Error Fault Injection Tool to Profile Application Vulnerability ........................................Qiang Guan — University of North Texas
Mentors: Nathan DeBardeleben and Sean Blanchard, HPC-5

Control Systems Security ............................................................................Justin Hobbs — Norfolk State University
Mentor: Sandy Frost, DCS-1

PyDac: A Resilient Run-time Framework for Divide-and-Conquer Applications on a Heterogeneous Many-core Architecture ..................................................Bin Huang — University of North Carolina at Charlotte
Mentors: Nathan DeBardeleben and Sean Blanchard, HPC-5

Zenoss Monitoring and Support ................................................................. Daniel Illescas — University of New Mexico
Mentor: Laura Davey, HPC-3
Remedy ITSM AskIT System ................................................................. Crystal Lulgjuraj – Alabama A&M University
Mentor: Julie A. Brady, ITPMO

Testing the Test ............................................................................. Matthew Morgan – Eastern New Mexico University
Mentor: Alfred Torrez, HPC-1

Work in the NOC (Network Operations Center) ............................... Casey Mortensen – New Mexico Tech
Mentor: Darryl Sandoval, NIE-CS

Configuring Macintosh OS X for authentication to LDAP server at Los Alamos National Lab ..................................................... Kyle Parks – University of New Mexico
Mentor: Jason Allison, HPC-5

Introducing Artificial Neural Networks to Entity Disambiguation A Continuance in Discovering “Entity Disambiguation Using Semantic Networks” ............................................................ Anthony J. Pearson – St. Cloud State University
Mentor: Jorge H. Roman, HPC-1

An Analysis Framework for a Parallel Log-Structured File System ........................................................................................................... Annika Peterson – Carnegie Mellon University
Mentor: Brett Kettering, HPC-5

DCS-2 Student Summer Internship .................................................. Veronica T. Teba – Northern New Mexico College
Mentor: Agoyo Duran, DCS-2

Mentors: HB Chen, HPC-5 and Jeff Inman, HPC-1

Compiler Performance Benchmark and Testing ............................... Benjamin Turrubiates – New Mexico Tech
Mentors: David Gunter and Georgia Pedicini, HPC-3

Mitigating Cyber Security Risks in the Enterprise Utilizing Remote Tools and Continuous Monitoring ............... Jason Velasquez – Northern New Mexico College
Mentor: JC Garcia, DCS-4 HDCS

Inhomogeneous Spectral Expansions for Ocean Circulation Energetics .......... David Wells – Virginia Tech
Mentor: Balu T. Nadiga, CCS-2

TEAM POSTERS

Cloud Management with OpenStack .................................................... Bryan Barton – Blackburn College
Mentor: Dave Kennel, Derek Walker, Breen Malmbe, DCS-1

Instructors: Dane Gardner and Matthew Broomfield, NMC-PRObE / NSEC
Network Service Security Through Software Defined Networking

.....................................................................................John Bilberry — University of Texas at El Paso
.....................................................................................Melanie Palmer — New Mexico Tech

Mentors: Kyle Lamb, HPC-3 and Benjamin McClelland, HPC-5
Instructors: Dane Gardner and Matthew Broomfield, NMC-PRObE / NSEC

Cyber Threat Reduction ..................................................................Ashley Brown — University of New Mexico
..........................................................................................Tamara Valdez — Northern New Mexico College

Mentor: Sue Cummings, ITPMO

High Performance Computing History Project ...................Aaron Caldwell — University of New Mexico
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Mentors: Gary Grider, Alex Malin, HPC-DO; Carolyn Connor, Craig Idler, Paul Iwanchuk, HPC-5; Jeff
Johnson, HPC-3; and Sue King, IRM-CAS

Etch 5: A Graphical Contour Modeling Tool for InGen .............Natalie Chrien — Pacific Lutheran University
..........................................................................................Meredith Webster — University of Minnesota-Twin Cities

Mentor: Laura Lang, HPC-1

Functional Assessment of Erasure Coded Storage Archive ........Blair Crossman — New Mexico Tech
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Mentors: HB Chen, HPC-5 and Jeff Inman, HPC-1
Instructors: Dane Gardner and Matthew Broomfield, NMC-PRObE / NSEC

A Comparison of Library Tracking Methods in High Performance Computing ..................................................Chris DeJager — Michigan Technological University
..........................................................................................William Rosenberger — New Mexico Institute of Mining and Technology

Mentors: Georgia Pedicini and David Gunter, HPC-3
Instructors: Dane Gardner and Matthew Broomfield, NMC-PRObE / NSEC

Open Source Virtual Environment System ..........................Jose Diaz — Hudson County Community College
..........................................................................................Jean Carlos Henriquez — Rutgers

Mentor: David Modl, HPC-5

Image Analysis at Scale ........Connor Dolan, Peter Ortegel and William Vining — University of New Mexico

Mentors: Christine Ahrens, CCS-7, C. Reese Baird, HPC-3, Reid Porter, ISR-3

Detecting Firewall Policy Violations in an Open-Collaborative Network ..................................................Alex Molnar — United States Military Academy
..........................................................................................Katy Protin — The University of North Carolina at Chapel Hill

Mentor: Alex Malin, HPC-DO

Computers: Abolish, Rebuild, Customize (ARC) ..................Krystal A. Montoya — University of New Mexico
..........................................................................................Jerome L. Sanchez — New Mexico State University

Mentors: Mark Lausen and Ron Crotzer. DCS-2