Overview of the Institute for Scientific Computing Research and the scholar program at LLNL

UC Davis – Lawrence Livermore National Laboratory Exploring Collaborations in the Data Sciences

Ghaleb Abdulla
Director, ISCR

Lawrence Livermore National Laboratory

LLNL-PRES-XXXXXX

This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344. Lawrence Livermore National Security, LLC

ISCR's mission is to engage, educate and empower scientist– both inside and outside of LLNL

- Data science focus
- Develop partnerships with Academia:
  - UC Davis
  - Georgetown
  - Stanford
  - UC Berkeley

- Run the masterworks Seminar series
- Help schools develop curriculum in the data science area
  - Focus on scientific domains (Health, energy, Physics, Astronomy, etc.)
- Establish Joint research opportunities
- **Host summer scholars**

Summer internship, why LLNL?

- Practical and hands-on experience with scientific challenges of *national* and *international* importance
  - R&D experience for participating students
  - Feedback to academia: Competitive students
- Opportunity to interact with students from other schools and different seniority levels (undergrad, masters, Ph.D.)
- Work in teams
- Learn about the work and research environment at LLNL
  - Best tool for recruiting
- Competitive salary (?)

Scholar program Stats

- 131 students and faculty
  - 76 graduate students
  - 49 undergraduate students
  - 1 high school student
  - 5 faculty
- 89 Universities, 8 different countries
  - Davis (8 students)
- 53 mentors hosted students

Computation Sponsored activities

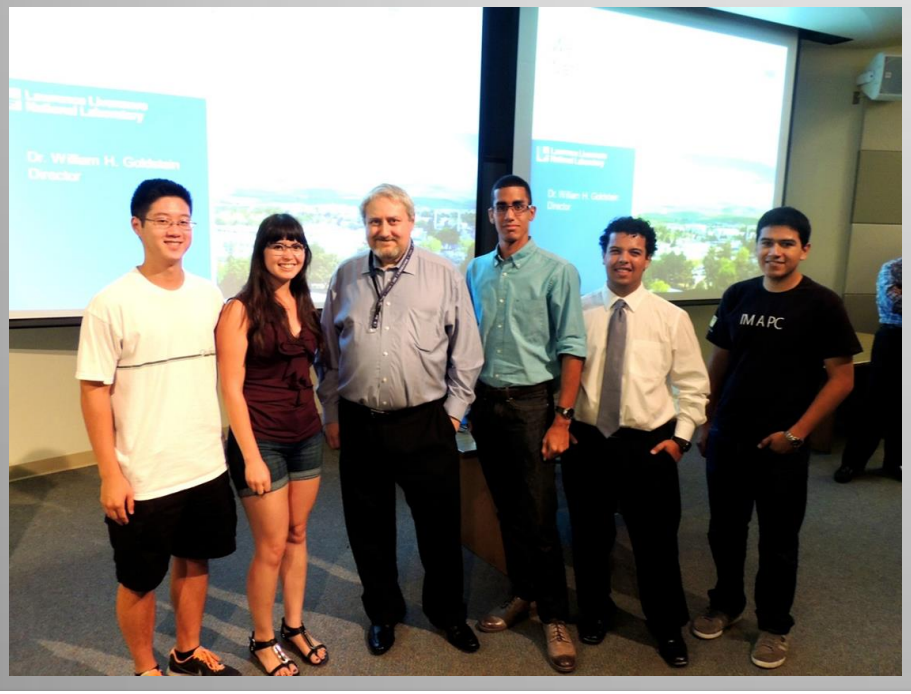
- Walking tours (new)
- Apple Time
- HPC Workshop
  - **Week long course focusing on Parallel computing, LC resources, Linux clusters, MPI and LC tools**
- Student seminar series
  - Political Savvy, GIS, Supercomputing, Cyber Security
- Resume workshop / resume critique
- Meet and Greet/photo with Dona
- **Geek girls / speed networking**
- Mock interviews
- ACE event for graduating seniors
- Hackathon

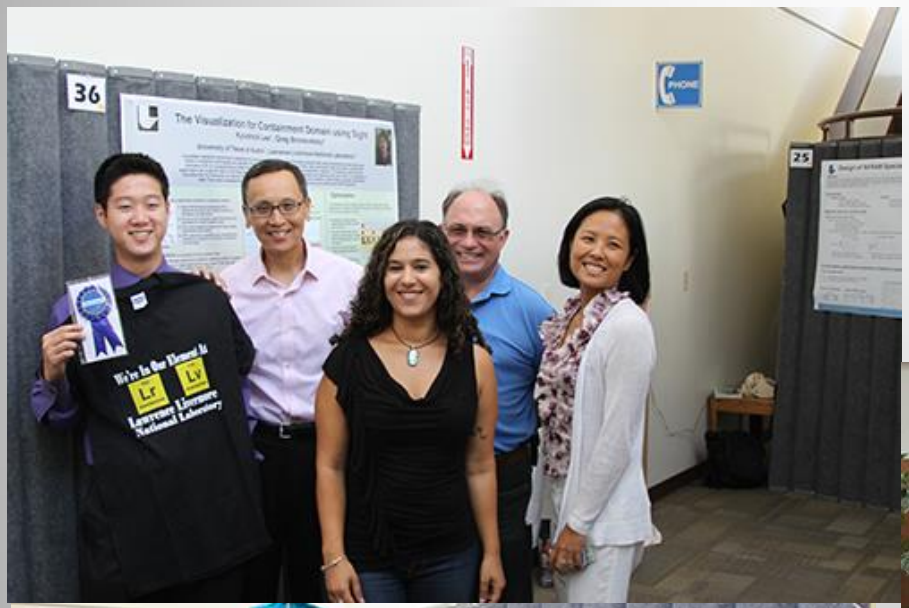
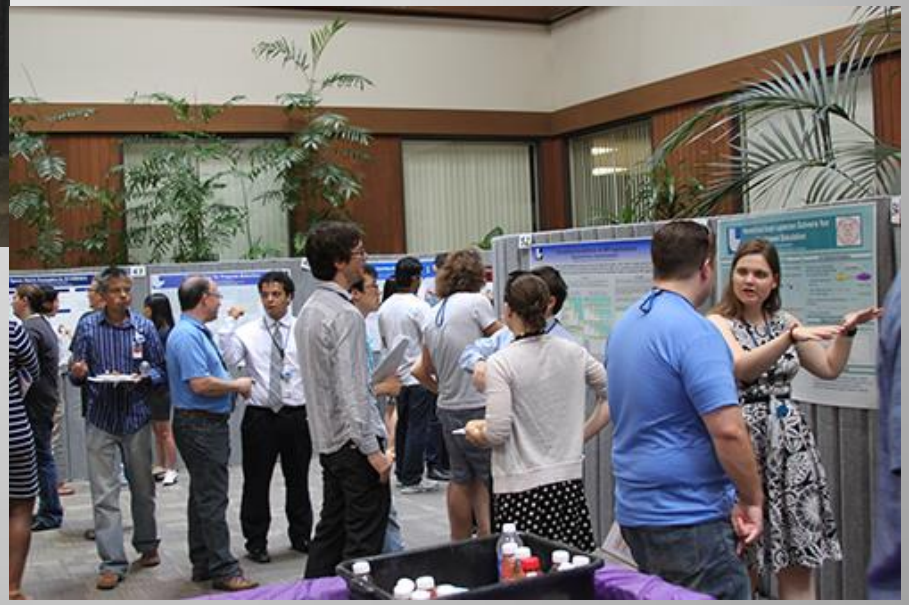
Cyber Defenders program

- Network security class/lab – twice a week
- Cyber Security video training – twice a week
- Tracefire / Capture the Flag competition
- Cyber Defenders debate
- Political, Legal issues with cyber workshop
- Poster Symposium and presentations

Institution Activities

- Student BBQ
- Rafting trip



- Meet the Director
- Poster Symposium

Student Poster Symposium