**Partnership for International Research and Education (PIRE)**

- PIRE is a 5-year long project funded for $2.3 million by NSF (<4% acceptance rate)
- Provides international research and training experiences to its participants
- Leverages the established programs, resources, and community of the LA Grid
- Top students work
  - With local and international researchers
  - In academic and industrial research labs
  - On basic and applied research projects
Figure 2: Relationship among the different projects. The International Country Codes are used to indicate the countries involved in each project: US: USA, ES: Spain, MX: Mexico, CN: China, JP: Japan, IN: India, and AR: Argentina.
OBJECTIVES

- PIRE brings together a global network of researchers, faculty members, and students currently distributed across global distances.
- PIRE develops a body of theory, techniques, and tools that will facilitate a more effective and broader global CI.
- PIRE engages underrepresented Hispanic minorities into world-class research and education.
- PIRE impacts research and teaching at FIU and FAU through established international research collaborations.
FACULTY ADVISORS
INTERNATIONAL TRAVELS: 2008

- Argentina: Borko
  - UNLP
- China: Yi
  - IBM CRL, Tsinghua, NSF China Office
- India: Giri
  - IBM IRL
- Mexico: Yi, Pete, and Juan
  - ITESM, UdG
- Spain and France: Masoud
  - BSC, UPC, UPF, UCM, PIC, UAB, IBM France, NSF Office in Europe
Brazil: Masoud & Borko (Planned)
  - UFF & USP
China: Yi & Jason Liu
  - Tsinghua, IBM CRL,
France: Peter Clarke (not paid by PIRE)
  - INRIA & Rennes
India: Raju Rangaswami (partially paid by PIRE)
  - IBM IRL & IISc
Italy: Borko & Masoud (Planned)
  - UNIMI
Spain: Masoud
  - BSC, UPC
Taiwan: Yi
  - NCHC
2008: Faculty Advisors
FIU/FAU Faculty Participants

**FIU:**
1. Dr. Shu-Ching Chen: 1
2. Dr. Peter Clarke: 1
3. Dr. Raju Rangaswami: 1
4. Dr. Masoud Sadjadi: 6

**FAU:**
1. Dr. Eduardo Fernandez: 1
2. Dr. Andres Folleco: 1
3. Dr. Borko Furht: 0.5
4. Dr. Shihong Huang: 2
5. Dr. Hari Kalva: 2
6. Dr. Oge Marques: 0.5
7. Dr. Abhijit Pandya: 1
8. Dr. Xingquan Zhu: 1
Argentina:
1. Dr. Gustavo Rossi: 3

China:
1. Dr. Junwei Cao: 1
2. Dr. Shixia Liu: 1
3. Dr. Tao Pin: 2
4. Dr. Yong Zhang: 1
5. Dr. Jun Zhu: 1

India:
1. Dr. Gargi Dasgupta: 1
2. Dr. Akshat Verma: 1

Mexico:
1. Dr. Hector Duran Limon: 3

Spain:
1. Dr. Rosa Badia: 2
2. Dr. Ricard Gavalda: 1
3. Dr. Josep Gelpi: 1
2009: FACULTY ADVISORS
FIU/FAU FACULTY PARTICIPANTS

- **FIU:**
  1. Dr. Malek Adjouadi: 1.5
  2. Dr. Shu-Ching Chen: 1
  3. Dr. Peter Clarke: 2
  4. Dr. Yi Deng: 1
  5. Dr. Raju Rangaswami: 1
  6. Dr. Naphtali Rishe: 1
  7. Dr. Masoud Sadjadi: 6.5

- **FAU:**
  1. Dr. Shihong Huang: 3
  2. Dr. HariKalva: 1
2009: FACULTY ADVISORS
INT’L FACULTY PARTICIPANTS

- **Brazil:**
  1. Dr. Esteban Clua: 6

- **China:**
  1. Dr. Shixia Liu: 1
  2. Dr. Jijiang Yang: 1.5
  3. Dr. Yong Zhang: 1.5

- **France:**
  1. Dr. Jean-Marc Jezequel: 3

- **India:**
  1. Dr. Akshat Verma: 1

- **Spain:**
  1. Dr. Rosa Badia: 2
  2. Dr. Jordi Torres: 1
  3. Dr. Pedro Cuenca: 1
## 2008: Student Participants

<table>
<thead>
<tr>
<th>FIU Students</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Destination</td>
<td>Citizenship</td>
<td>Status</td>
<td>Major</td>
<td>Sex</td>
<td>Ethnicity</td>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Bright, Marlon</td>
<td>Spain</td>
<td>USA</td>
<td>UG</td>
<td>CS</td>
<td>M</td>
<td>Non-Hispanic</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Chaterjee, Kasturi</td>
<td>China</td>
<td>India</td>
<td>PhD</td>
<td>CS</td>
<td>F</td>
<td>Non-Hispanic</td>
<td>Asian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Delgado, Javier</td>
<td>Spain</td>
<td>USA</td>
<td>PhD</td>
<td>CE</td>
<td>M</td>
<td>Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Kalayci, Selim</td>
<td>India</td>
<td>Turkey</td>
<td>PhD</td>
<td>CS</td>
<td>M</td>
<td>Non-Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 King, Tariq</td>
<td>China</td>
<td>Barbados</td>
<td>PhD</td>
<td>CS</td>
<td>M</td>
<td>Non-Hispanic</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Koller, Ricardo</td>
<td>India</td>
<td>Bolivia</td>
<td>PhD</td>
<td>CS</td>
<td>M</td>
<td>Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Lanager, Allison</td>
<td>Mexico</td>
<td>USA</td>
<td>MS</td>
<td>CS</td>
<td>F</td>
<td>Non-Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Leslie, Sean</td>
<td>Mexico</td>
<td>USA</td>
<td>UG</td>
<td>CS</td>
<td>M</td>
<td>Non-Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Silva, Camilo</td>
<td>Mexico</td>
<td>Colombia</td>
<td>UG</td>
<td>CE</td>
<td>M</td>
<td>Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAU Students</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Destination</td>
<td>Citizenship</td>
<td>Status</td>
<td>Major</td>
<td>Sex</td>
<td>Ethnicity</td>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Bernal, Juan</td>
<td>Spain</td>
<td>Colombian</td>
<td>UG</td>
<td>CE</td>
<td>M</td>
<td>Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Beyer, Justin</td>
<td>Spain</td>
<td>USA</td>
<td>UG</td>
<td>CS</td>
<td>M</td>
<td>Non-Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Buckley, Ingrid</td>
<td>Argentina</td>
<td>Jamaica</td>
<td>MS</td>
<td>CS</td>
<td>F</td>
<td>Non-Hispanic</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Carrillo, Paula</td>
<td>China</td>
<td>Colombia</td>
<td>MS</td>
<td>EE</td>
<td>F</td>
<td>Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Holder, Christopher</td>
<td>China</td>
<td>USA</td>
<td>MS</td>
<td>CE</td>
<td>M</td>
<td>Non-Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Kotlarchyk, Alex</td>
<td>Argentina</td>
<td>USA</td>
<td>PhD</td>
<td>CS</td>
<td>M</td>
<td>Non-Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Mangs, Jan Christian</td>
<td>China</td>
<td>USA</td>
<td>MS</td>
<td>CS</td>
<td>M</td>
<td>Non-Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Ortega, Lina</td>
<td>China</td>
<td>Colombia</td>
<td>UG</td>
<td>EE</td>
<td>F</td>
<td>Hispanic</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Pasmore, Simone</td>
<td>Argentina</td>
<td>USA</td>
<td>MS</td>
<td>CS</td>
<td>F</td>
<td>Non-Hispanic</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2008: STUDENT PARTICIPANTS DISTRIBUTIONS

University Rank Major Citizenship Ethnicity Race Sex

FIU FAU PhD MS UG CS CE EE USA Other Hispanic Non-Hispanic White African American Asian Male Female
<table>
<thead>
<tr>
<th>FIU Students</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Last</td>
<td>First</td>
<td>Destination</td>
<td>Citizenship</td>
<td>Status</td>
<td>Major</td>
<td>Sex</td>
</tr>
<tr>
<td>1 Allen</td>
<td>Andrew</td>
<td>France</td>
<td>Jamaica</td>
<td>PhD</td>
<td>CS</td>
<td>Male</td>
</tr>
<tr>
<td>2 Armella</td>
<td>Michael</td>
<td>China</td>
<td>USA</td>
<td>PhD</td>
<td>CS</td>
<td>Male</td>
</tr>
<tr>
<td>3 Delgado</td>
<td>Javier</td>
<td>Brazil</td>
<td>USA</td>
<td>PhD</td>
<td>CE</td>
<td>Male</td>
</tr>
<tr>
<td>4 Hernandez</td>
<td>Yanelis</td>
<td>France</td>
<td>Cuba</td>
<td>PhD</td>
<td>CS</td>
<td>Female</td>
</tr>
<tr>
<td>5 Koller</td>
<td>Ricardo</td>
<td>India</td>
<td>Bolivia</td>
<td>PhD</td>
<td>CS</td>
<td>Male</td>
</tr>
<tr>
<td>6 Wu</td>
<td>Yali</td>
<td>France</td>
<td>China</td>
<td>PhD</td>
<td>CS</td>
<td>Female</td>
</tr>
<tr>
<td>7 Greko</td>
<td>Peter</td>
<td>Mexico</td>
<td>USA</td>
<td>BS</td>
<td>IT</td>
<td>Male</td>
</tr>
<tr>
<td>8 Ikeda</td>
<td>Sejiro</td>
<td>Brazil</td>
<td>Venezuela</td>
<td>BS</td>
<td>IT</td>
<td>Male</td>
</tr>
<tr>
<td>9 Munive</td>
<td>Alfonso</td>
<td>Brazil</td>
<td>USA</td>
<td>BS</td>
<td>IT</td>
<td>Male</td>
</tr>
<tr>
<td>10 Sacez</td>
<td>Jonathan</td>
<td>Brazil</td>
<td>USA</td>
<td>BS</td>
<td>IT</td>
<td>Male</td>
</tr>
<tr>
<td>11 Zaidi</td>
<td>Sajjad</td>
<td>Brazil</td>
<td>USA</td>
<td>BS</td>
<td>IT</td>
<td>Male</td>
</tr>
<tr>
<td>12 Meyer</td>
<td>Lawrence</td>
<td>Spain</td>
<td>USA</td>
<td>PhD</td>
<td>CS</td>
<td>Male</td>
</tr>
<tr>
<td>13 Lizarraga</td>
<td>Gabriel</td>
<td>Spain</td>
<td>USA</td>
<td>MS</td>
<td>CE</td>
<td>Male</td>
</tr>
<tr>
<td>14 Melendez</td>
<td>Lester</td>
<td>Spain</td>
<td>USA</td>
<td>PhD</td>
<td>CS</td>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAU Students</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Last</td>
<td>First</td>
<td>Destination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Garcia</td>
<td>Adriana</td>
<td>China</td>
<td>Columbia</td>
<td>MS</td>
<td>CS</td>
<td>Female</td>
</tr>
<tr>
<td>2 Rajan</td>
<td>Mark</td>
<td>Spain</td>
<td>USA</td>
<td>MS</td>
<td>CS</td>
<td>Male</td>
</tr>
<tr>
<td>3 Roepnack</td>
<td>Scott</td>
<td>China</td>
<td>USA</td>
<td>MS</td>
<td>CS</td>
<td>Male</td>
</tr>
<tr>
<td>4 Petersen</td>
<td>Jake</td>
<td>China</td>
<td>USA</td>
<td>BS</td>
<td>CS</td>
<td>Male</td>
</tr>
</tbody>
</table>
2009: Student Participants Distributions
Language and Cultural Training
Unique Consortium for International Collaboration

- Partnerships driven by Cyberinfrastructure (CI) Research Framework
- Multi-national university, industry, and National Supercomputing Center collaborations: five countries, seven institutions, 18 student, 14 US research advisors, and 14 international collaborative advisors in first its year
- Institutional approach to international research collaboration: Intellectual Property, Non-disclosure, and Student Exchange agreements through Latin American Grid
- Student participants become part of an international network of researchers, building collaborations that will enhance career opportunities while gaining an understanding of the globalized information technology market
PIRE WORKSHOP AT THE SIXTH LA GRID SUMMIT, OCT. 2008
2008: Problems, Solutions, and Lessons Learned

- Expectation should be clearly defined
- What is reimbursable should be clearly defined
- Engage local and Int’l Advisors ASAP
- Students should start their projects ASAP
- Visa applications may take longer than expected
- Lodging should be planned early on
- Provide students with maps and local information
- Cultural training is very important
- Language training cannot be done in one semester
- Regular weekly reports should be in place
- Regular weekly meeting should be in place
CONTACT INFORMATION

Yi Deng deng@cs.fiu.edu
Masoud Sadjadi sadjadi@cs.fiu.edu
School of Computing and Information Sciences
Florida International University

http://pire.fiu.edu/

Questions?

Thank You!
PUBLICATIONS
HIGHLIGHTS
PUBLICATIONS

**Journals**

1. Onyeka Ezenwoye and S. Masoud Sadjadi, "A proxy-based approach to enhancing the autonomic behavior in composite services", the Journal of Networks (ISSN 1796-2056), (2008), (accepted for publication).

**Conferences and Workshops**


8. Selim Kalayci, Onyeka Ezenwoye, Balaji Viswanathan, Gargi Dasgupta, S. Masoud Sadjadi, and Liana Fong. Design and implementation of a fault tolerant job flow manager using job flow patterns and recovery policies. In Proceedings of the 6th International Conference on Service Oriented Computing (ICSOC'08), Sydney,Australia, December 2008. Accepted for publication (acceptance rate 20.4%).


Conferences and Workshops


Posters


Posters


HIGHLIGHTS PUBLICATIONS

Posters


2008: TRAVEL QUOTES AND IMAGES
I was able to develop quite a bit as a person, researcher, and professional. – Marlon Bright

Being able to interact with new cultures, new people, new places, and see history with your own eyes has enriched my mind. – Juan Bernal
Jesus helped me the most, a very good guy and bought me a cup of espresso the first day I was there.
Accomplished quite a lot without feeling too overworked. Kasturi Chaterjee
One of my best experiences was when we attended the Olympics in Bird’s Nest.
NEW DELHI, INDIA
GOING PLACES
Ricardo: Excuse me sir, how far is Pria?
unknown guy: mmm, just catch an "auto" and don't pay more than 20 rupees (*)

...  
Ricardo: your turn Selim, 40 (20*2) seems reasonable
Selim: yeap

...  
Selim: To Pria please
Rishka driver: 150 rupees...
Being able to learn elements directly related to my project, the likes and dislikes of another's culture, and be able to communicate in a different language are all aspects related to the PIRE program for which I will always be grateful. – Simone Pasmore
ARGENTINA
MEETING PEOPLE!

... best experience was learning how to make Empanadas. It was a great group activity, because most of the members in the LIFIA lab attended and participated.– Ingrid Berkley

Alex Kotlarchyk– "...meeting relatives in Buenos Aires that I had never met before."
It helps you build confidence that the degree you hold will enable you to tackle any problem and, more importantly, it lets you experience the job before committing your life to it. — Allison Lanager
MEXICO
WAY TO GO..

Tequila Town
2008: POST-TRIP SURVEY DATA
2008: PRE-DEPARTURE ADMIN, TRAINING, IMMIGRATION

<table>
<thead>
<tr>
<th>Category</th>
<th>FIU</th>
<th>FAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin. FIU OEA / FAU OIP?</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Training Material</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Training Language &amp; Cultural?</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Immigration Visa?</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Turn around (days)?</td>
<td>13</td>
<td>20.25</td>
</tr>
</tbody>
</table>
2008: DURING STAY ABROAD
ARRIVAL, TRANS., CAMPUS, COMM.
2008: DURING STAY ABROAD INTERNATIONAL EXPERIENCE

- **Argentina**: Enough Time?
- **China**: Language Preparation?
- **India**: Joined club?
- **Mexico**: FIU OEA / FAU OIP?
- **Spain**: Enough Time?

The chart compares the percentage of students who had enough time, prepared for language, joined a club, or used FIU OEA / FAU OIP services in Argentina, China, India, Mexico, and Spain.
2008: While Stay Abroad
Research Advising & Resources

Argentina | China | India | Mexico | Spain
2008: EXPENSES
TRAVEL

Total $85,072
Budget $86,325
Carryover $1,253
Average $4,726
2008: EXPENSES
FIU OEA & FAU OIP

Total $ 2,943
Budget $ 4,900
Carryover $ 1,957
Average $ 164