SIParCS Alumni Through the Years
2007-2020

JESS HOOPENGARDNER,
CISL OUTREACH, DIVERSITY, AND EDUCATION INTERN
JULY 2020
What is the Summer Internships in Parallel Computational Science Program?

- Started in 2007
- 176 Alumni
- Dedicated to increasing representation in HPC
Over time, SIParCS has had…
- 27% women
- Around 30% underrepresented students
- 1.7 ratio of graduate to undergraduate students
- At least 30% international students
Alumni Publications

800+  ➔  900+

2019  ➔  2020
Connecting with Alumni

Jessica Hoopengardner • 3:53 PM
Hello! I currently work with the SIParCS Program at NCAR and would like to connect so I can invite you to our alumni group. We want to keep up-to-date on the amazing work our alumni do. Thanks, Jessica Hoopengardner (CISL Outreach, Diversity, and Education Intern).

Jessica Hoopengardner • 11:20 AM
Hello! Thank you for connecting with me! I wanted to follow up on the invitation to our SIParCS Alumni group. You should have received an invitation from me within the past few weeks—please let me know if you would like me to resend it! - Jessica
Are you a mentor? A new alum? Join us!

Scan the QR Code!
Log into LinkedIn!
Request to Join!
Alumni Spotlight: Weile Wei

- Earned Master in Computer Science at Louisiana State University in May 2020.
  - Thesis title: Enabling Parallel Abstraction Layer to DCA++ Using HPX and GPUDirect
- Started Ph.D. in Computer Science at Louisiana State University in May 2020
- Working on an Oak Ridge National Lab funded research project.
A Stellar Opportunity

An LSU research group has been participating in Google Summer of Code since 2014, and for the first time since then, an LSU student is among those who will be paid by Google to help make the group’s high-performance computing solutions even faster and more efficient.

Each summer, students travel all over the world to be matched with mentors and various open-source software development projects. Google Summer of Code has connected more than 15,000 students, 109 countries, and 686 different organizations since the program began in 2005.

Over the years, a total of 22 students have joined the LSU STEIIAR Group for Google Summer of Code “to help push the bar on what’s possible,” according to the group’s website. Housed in the Center for Computation & Technology (CCT), the STEIIAR Group has 18 members and is led by Hartmut Kaiser, a CCT senior research scientist and adjunct assistant professor in the LSU Departments of Computer Science and Electrical Engineering. Kaiser is one of the world’s leading developers of the C++ programming language and a featured Collaborative Champion in the latest issue of LSU Research magazine.

The STEIIAR Group has received significant support for its projects, and not just from Google. Kaiser is the principal investigator on four current grants, including from Booz Allen Hamilton (Department of Defense), Sandia National Lab, Oak Ridge National Lab, and Los Alamos National Lab for a total amount of $2.1M. The reason the research group’s name is written a little funny (STEIIAR as opposed to STELLAR, an acronym for System Technology, Emergent Parallelism, and Algorithm Research) is because much of its work is focused on parallelism, a way to divvy up tasks between multiple computers, or multiple threads in the same computer, to make the overall work go faster—a key to scalability. Complex algorithms control exactly how the work is split up, with nothing getting lost or corrupted along the way. Without parallelism, the advanced graphics in most video games would not be possible to render before you, the hero, would already have leapt into your next adventure.
SIParCS Alumni in the News
The NFL has more data on its players than ever before, but evaluating prospects still involves a lot of guesswork. Here’s how some teams are getting creative to find their perfect pick.

By Kevin Clark  |  Apr 22, 2019, 6:30am EDT

“Scouts have a keen eye. They see things that are spot on. This is not ‘Oh, these guys not qualified and missing the picture and that’s why the draft is so hit-and-miss.’ It’s not it at all. They know what they see, and they tend to be right,” says Karl Pazdernik, cofounder of Deep Football, a company that applies machine learning to player evaluation. Pazdernik is a data scientist who became fascinated by the draft.
Making artificial intelligence practical, productive, and accessible to everyone

Daniel Whitenack
SIParCS 2008
As oil prices crashed, tankers idled off California—spewing pollution for weeks

This scrum of oil tankers, right next to the Los Angeles basin, emitted tons of air pollutants and CO2 while they were parked.

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It is clear to me that underserved communities will continue to suffer the brunt of what’s going on.

Cesunica Ivey, University of California, Riverside
22 UW students receive Fulbright awards

Jackson Holtz
UW News

Joshua Driscol - SIParCS 2018
Atmospheric Sciences major: Research Grant to Norway
Other CODE Intern Projects

• SIParCS Social Hour
• Professional Development Sessions
  – Diversity and Inclusion
  – Resumes and CVs
• Literature Review for the DEI Team
• Virtual Poster Symposium Set Up
• Women’s Mentoring Breakfasts
Thank you to AJ Lauer, Virginia Do, Eliott Foust, Agbeli Ameko, Jerry Cycone, all of the SIParCS and NCAR-WY students, and ODEI!
You all made this summer so memorable and impactful on my development as a professional.
About the Presenter

Jess Hoopengardner is a 2nd year Masters student at Indiana University Bloomington, studying Higher Education and Student Affairs with a certificate in College Pedagogy. This summer, she worked as the CISL Outreach, Diversity, and Outreach Intern at NCAR/UCAR.