

RESEARCH COMPUTING STUDENT PROGRAM - GROWING THE WORKFORCE THROUGH PROVIDING STUDENTS PROFESSIONAL DEVELOPMENT OPPORTUNITIES

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Agenda

- Introduction
- Research Computing - Introduction
- Envision Center - Introduction
- Career and Opportunities
- Process and Tools
- Recruitment
- Future Engagement
- Questions?

Introduction

**Laura Theademan,
Sr Operations Manager, Envision Center**

Boilermakers!



**Betsy Hillery,
Associate Director, Research Computing**

Research Computing – Introduction

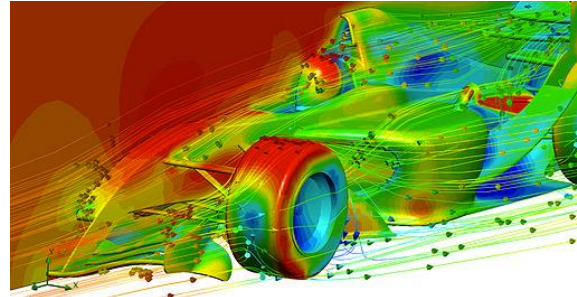
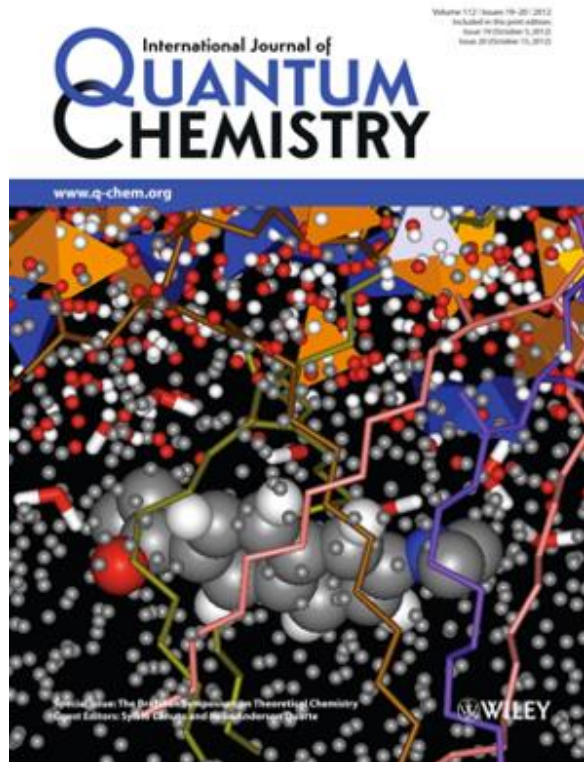
Who is Research Computing?

- IT Research Computing (RCAC)
- A unit of ITaP (Information Technology at Purdue) - the central IT organization at Purdue
- RCAC provides advanced computation resources and services to support Purdue faculty and staff researchers.

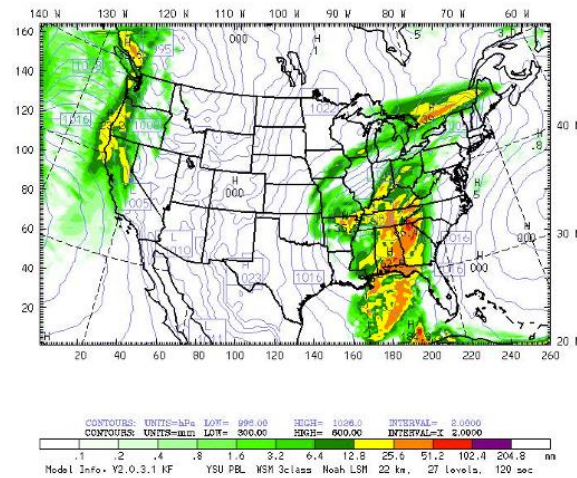


Our goal: To be the one-stop provider of choice for research computing and data services at Purdue -Delivering powerful, reliable, easy-to-use, service-oriented computing and expertise to Purdue researchers.

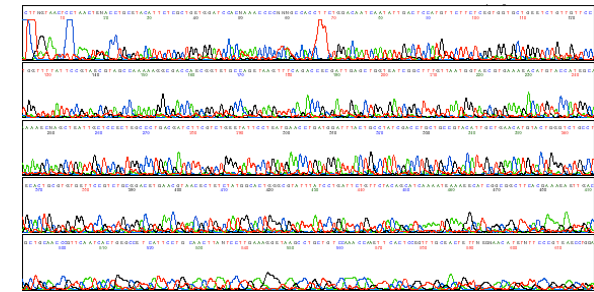
What do HPC Users Do?



Engineering



Weather



Life Science

Evolution of HPC at Purdue



Spring of 1983 Purdue acquired a Cyber 205 - one of the most powerful systems operated by a university.



By the early 2000s, PUCC had taken to using Linux clusters, and a general purpose resource made from retired computer lab systems was in production.



Envision Center - Introduction

Evolution of Envision Center at Purdue



- Founded 2004: MRI grant
- Focused on science data
- Research Center for faculty



Mission Statement:

Our mission is to assist, support, and collaborate with faculty, students, and industry in scientific visualization, virtual and augmented reality and media creation. Our purpose is to provide work opportunities and real workplace experience that enhance the student's education through the development of professional skills, responsibilities, habits, attitudes, self-confidence and self-development.



Envision Center - Today



- Virtual/Augmented Reality
- Data Visualization
- Motion Capture
- Media Creation

Career and Opportunities

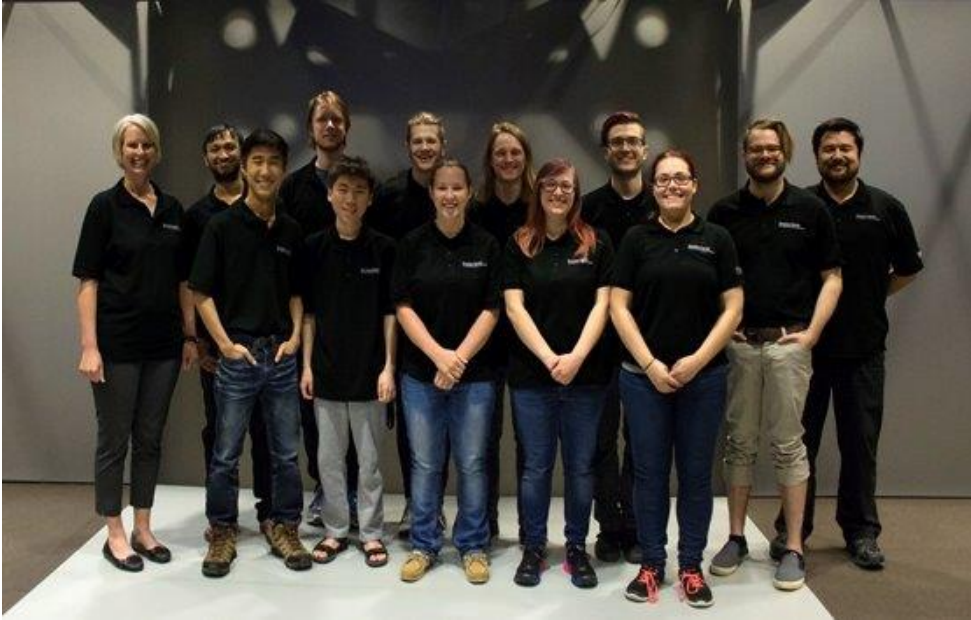
Career and Opportunities – Research Computing



- Student Web and Database Developer
- Student HPC Systems Administrator
- Student Cybersecurity Analyst
- Student Application Support

https://www.rcac.purdue.edu/about/jobs/application_support/

Career and Opportunities – Envision Center



- Student Simulation Programmer
- Student Web Developer
- Student Graphics Artist
- Student Graphics Designer

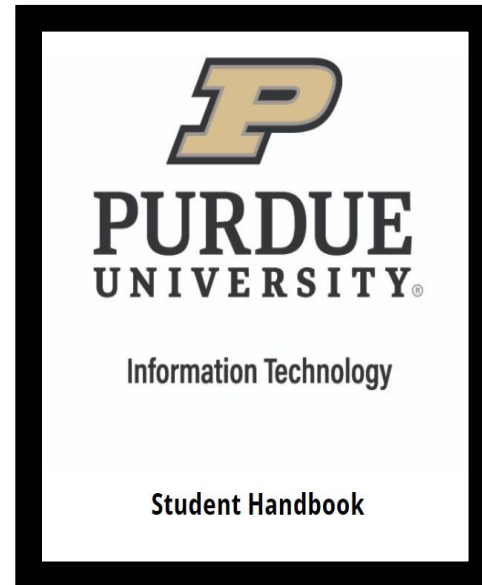
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Processes and Tools

Processes



<http://clipart-library.com/clipart/1171339.htm>



<https://www.techwell.com/techwell-insights/2016/08/secret-life-team-leads>



<http://slack.org>



<http://discord.org>



<http://Asana.org>

Recruitment

Recruitment

- Interview process – student participation
- Departmental Job Boards
- Purdue Job Fairs/Round Table events
- Student Clubs
- Faculty/Staff referrals
- Call-outs
 - Student Cluster Challenge
 - Hack-a-thons



Future Engagement

Future Engagements



- HPC and Visualization Seminar's
- Purdue Data Mine
 - Dr. Ward
- NSF 19-534 (Anvil Capacity Cluster)
 - Butler Center – Enabling Inclusion Proposal
 - NSF 201896 – CC*



THANK YOU

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QUESTIONS?

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