



HPC at VT

Robert Settlege

Advanced Research Computing

Spring 2020

It's that time of year...



Who am I

- Researcher
- Collaborator
- Educator
- Nvidia DLI Ambassador (CUDA, CV)
- Chemist
- Statistician
- Computational Scientist
- UVA grad and fan

The screenshot displays the Niche website's ranking for the 2020 Top Public Universities in America. The page features a sidebar with filters for college type (4-Year, Private, Public, 2-Year, Community, Trade/Career, Other), general area of study (Any), specific major (with a search bar and 'See All Majors' link), cost (net price), and student body size (Small, Medium, Large). The main content area lists the top three universities: University of Michigan - Ann Arbor (#1), University of California - Los Angeles (#2), and University of Virginia (#3). Each entry includes a brief description, overall niche grade, acceptance rate, net price, and SAT range. The University of Michigan - Ann Arbor is highlighted with a blue checkmark. The University of California - Los Angeles and University of Virginia are highlighted with green backgrounds. Each entry also has a 'Will You Get In?' button and an 'Add to List' button.

2020 BEST COLLEGES
NICHE

2020 Top Public Universities in America

The Top Public Universities ranking is based on rigorous analysis of academic, admissions, financial, and student life data from the U.S. Department of Education along for millions of reviews from students. [More](#)

[View On Map](#)

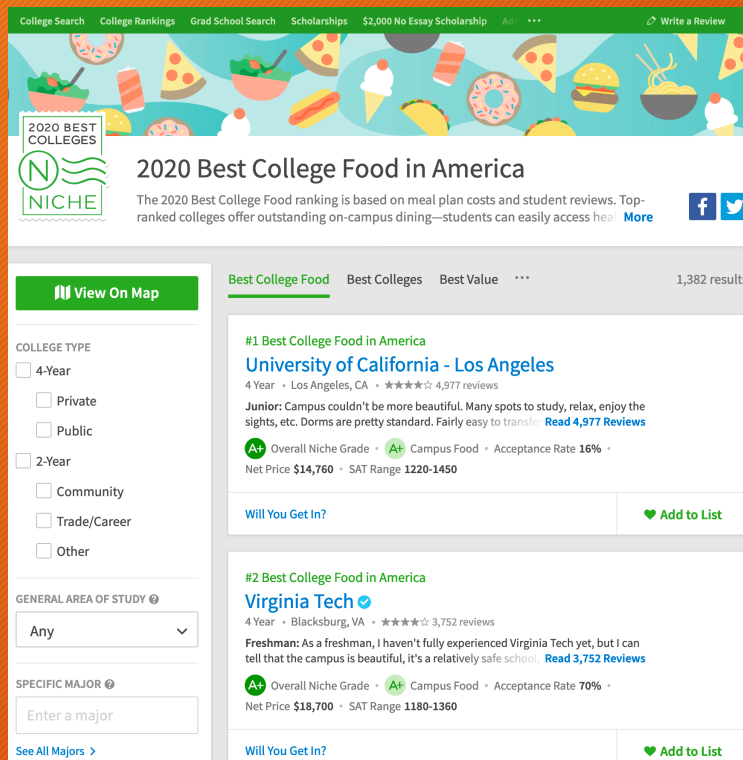
Best Colleges | Best Value | Best Student Life | Top Party Schools | ... 796 results

#1 Top Public Universities in America
University of Michigan - Ann Arbor ✓
4 Year • Ann Arbor, MI • ★★★★★ 4,124 reviews
Junior: Overall, the University of Michigan is a very strong academic choice. Professors generally care about their students and wish to see them succeed and degree. [Read 4,124 Reviews](#)
Overall Niche Grade: A+ • Acceptance Rate: 27% • Net Price: \$16,408 • SAT Range: 1330-1500
[Will You Get In?](#) [Add to List](#)

#2 Top Public Universities in America
University of California - Los Angeles
4 Year • Los Angeles, CA • ★★★★★ 4,977 reviews
Junior: Campus couldn't be more beautiful. Many spots to study, relax, enjoy the sights, etc. Dorms are pretty standard. Fairly easy to transfer rooms if a problem arises. [Read 4,977 Reviews](#)
Overall Niche Grade: A+ • Acceptance Rate: 16% • Net Price: \$14,760 • SAT Range: 1220-1450
[Will You Get In?](#) [Add to List](#)

#3 Top Public Universities in America
University of Virginia
4 Year • Charlottesville, VA • ★★★★★ 2,158 reviews
Freshman: UVA is a wonderful place to find your college home! Nowhere is perfect, but, coming from someone who was determined to not go to Virginia (I didn't want to go). [Read 2,158 Reviews](#)
Overall Niche Grade: A+ • Acceptance Rate: 27% • Net Price: \$16,594 • SAT Range: 1310-1500
[Will You Get In?](#) [Add to List](#)

We are Virginia Tech



College Search College Rankings Grad School Search Scholarships \$2,000 No Essay Scholarship Ad Write a Review

2020 BEST COLLEGES

2020 Best College Food in America

The 2020 Best College Food ranking is based on meal plan costs and student reviews. Top-ranked colleges offer outstanding on-campus dining—students can easily access healthy food. [More](#)

[View On Map](#)

COLLEGE TYPE

- ☐ 4-Year
 - ☐ Private
 - ☐ Public
- ☐ 2-Year
 - ☐ Community
 - ☐ Trade/Career
 - ☐ Other

GENERAL AREA OF STUDY

Any

SPECIFIC MAJOR

Enter a major

[See All Majors](#)

Best College Food Best Colleges Best Value 1,382 results

#1 Best College Food in America

University of California - Los Angeles

4 Year • Los Angeles, CA • ★★★★★ 4,977 reviews

Junior: Campus couldn't be more beautiful. Many spots to study, relax, enjoy the sights, etc. Dorms are pretty standard. Fairly easy to transfer. [Read 4,977 Reviews](#)

A+ Overall Niche Grade • A+ Campus Food • Acceptance Rate 16% • Net Price \$14,760 • SAT Range 1220-1450

[Will You Get In?](#) [Add to List](#)

#2 Best College Food in America

Virginia Tech

4 Year • Blacksburg, VA • ★★★★★ 3,752 reviews

Freshman: As a freshman, I haven't fully experienced Virginia Tech yet, but I can tell that the campus is beautiful, it's a relatively safe school. [Read 3,752 Reviews](#)

A+ Overall Niche Grade • A+ Campus Food • Acceptance Rate 70% • Net Price \$18,700 • SAT Range 1180-1360

[Will You Get In?](#) [Add to List](#)

The only school to:

- ✓ Sequence and assemble the genome of our mascot
- ✓ Serve our mascot on Saturdays
- ✓ And save said mascot in November



Symposium
Applying Next-Generation Sequencing to Solve Poultry Problems

Next-generation sequencing strategies for characterizing the turkey genome ¹

Rami A. Dalloul *✉, Aleksey V. Zimin †, Robert E. Settlage †, Sungwon Kim *, Kent M. Reed §

[Show more](#)

<https://doi.org/10.3382/ps.2013-03560> [Get rights and content](#)

Und



Presidential Turkeys return to roost at Virginia Tech

For the fourth year, the turkeys will travel from the White House to Gobblers Rest. Meet the newest Hokies at a Dec. 1 open house.
November 22, 2019



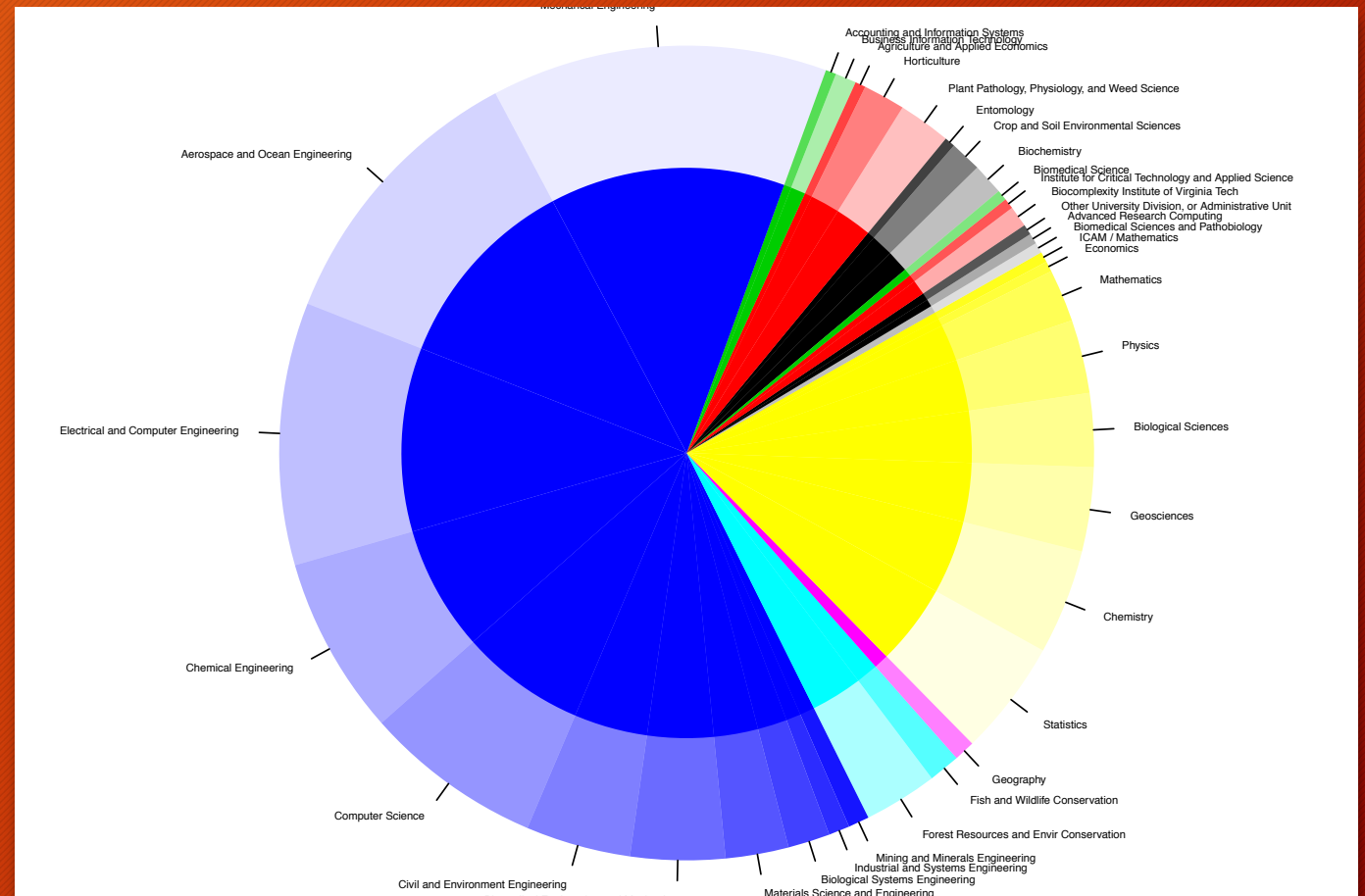
And well fed

Agenda

- ARC
- Getting Started on ARC
- Enabling Users with Open OnDemand

ARC - who we are

- Unit within the Office of the Vice President of Information Technology
- Provide centralized resources for:
 - Research computing
 - Visualization
- Staff to assist users
- Website: <http://www.arc.vt.edu>



ARC - what we do

- Advance the use of computing and visualization in VT research
- Centralize resource acquisition, maintenance, and support for research community
- Provide support to facilitate usage of resources and minimize barriers to entry
- Enable and participate in research collaborations between departments
- Provide resources for instruction

Getting started on ARC

What do you need?

- An account
- An allocation

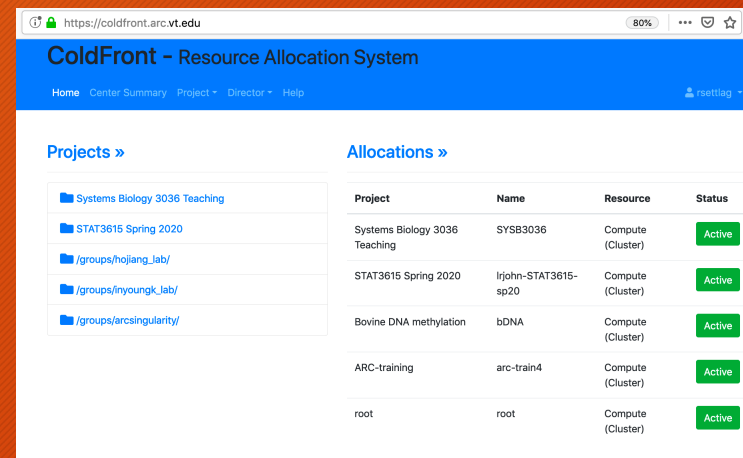


ARC.vt.edu

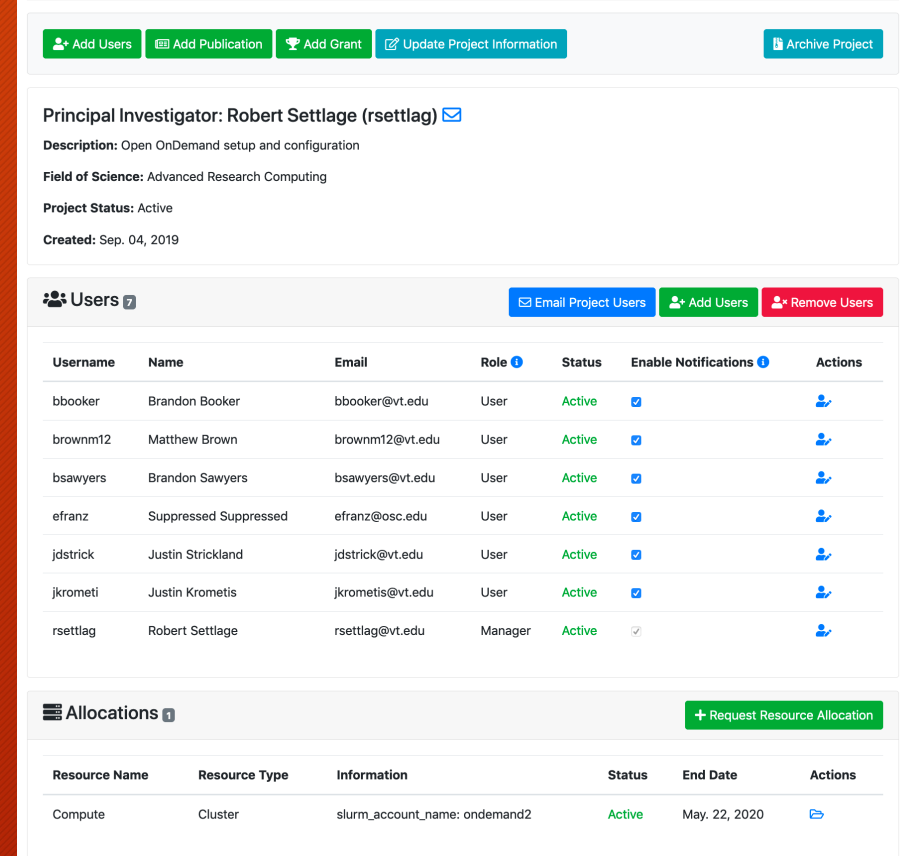
- Requests
- account request

Coldfront.arc.vt.edu

1. Create a project
2. Create an allocation



Open OnDemand 2.0



Student

- Odd form of life that tries random stuff to meet random goals while accidentally learning

Enabling Users with Open OnDemand

Provides an easy to install and use, web-based access to supercomputers, resulting in intuitive, innovative support for interactive supercomputing

Features:

- ✓ Plugin-free web experience
- ✓ Easy file management
- ✓ Command-line shell access
- ✓ Job management and monitoring
- ✓ Graphical desktop environments
- ✓ GUIs

Production Deployments



Adoption is growing

- Install base is growing
- Industry and academia
- ~140 unique US locations
- ~70 unique international locations



Interested / Evaluating

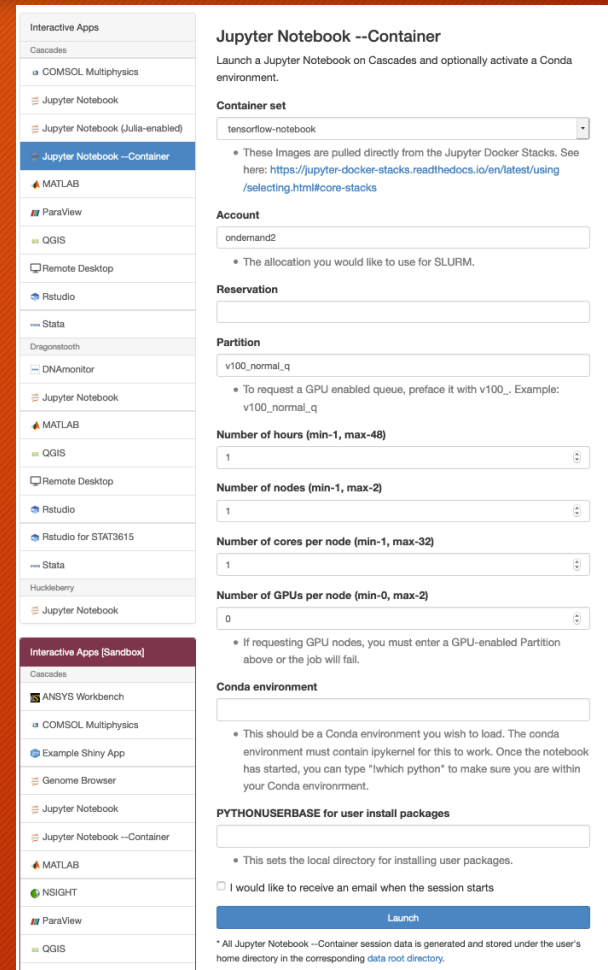
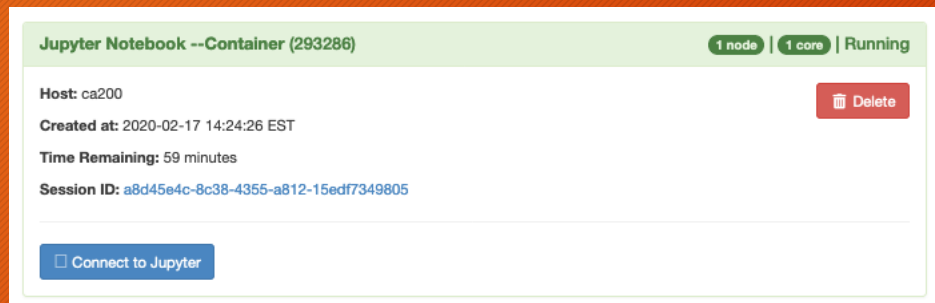
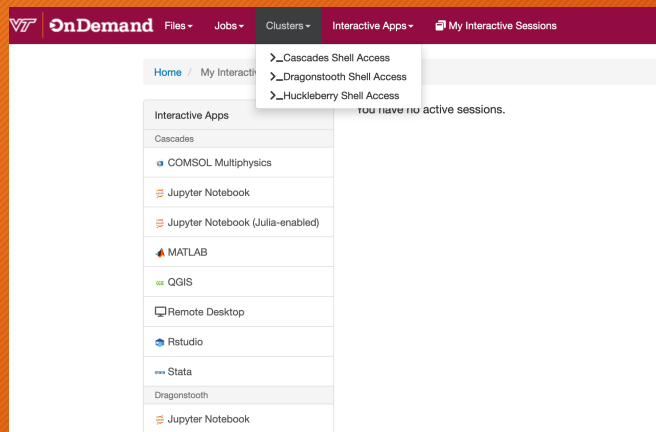


In Process of Installing



Enabling Users with Open OnDemand

Open OnDemand



ondemand.arc.vt.edu

Off-campus = VPN

Openondemand.org

Open OnDemand Demo



Questions?