ASA Student Chapter:
Summer 2020 Opportunity Guide

Please note that while many of these opportunities are free for the time being, many are available all year round.

ASA Student Chapter Links:

Website | ListServ | GroupMe | Twitter

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Online / Self-Guided Learning (stat-related/programming)

DataCamp

What is it?
Datacamp offers courses in Python, R, and SQL that are 100% optimized for mobile and taught by expert instructors. The gamified experience keeps you engaged while you master data science and analytics, and you learn from mistakes with our personalized instant feedback system.

Should I consider this?
If you have an interest in data science, business analytics, finance, marketing, machine learning, database development, app development, probability theory, R, Python, SQL, Excel, or statistics then yes: you should seriously consider this.

Is it free?
A limited version is available for free. The full version is available for $25/month or $250 per year. The ASA Student Chapter has a group for members that grants full, free access through September.

Note: A mobile app is available for tablets and phones—you can find it on Google Play for Android devices and the App Store for devices using iOS. These courses won't appear on the desktop site as a completed course, but the practice modules are great for retaining the skills you learned in previous courses.

Link to free plan & pricing info: https://www.datacamp.com/pricing

R for Data Science

What is it?
This is the website for **"R for Data Science"**. This book will teach you how to do data science with R: You'll learn how to get your data into R, get it into the most useful structure, transform it, visualise it and model it. In this book, you will find a practicum of skills for data science. You'll learn how to use the grammar of graphics, literate programming, and reproducible research to save time. You'll also learn how to manage cognitive resources to facilitate discoveries when wrangling, visualising, and exploring data.

Should I consider this?
Probably. It's written by Garrett Grolemund and Hadley Wickham—the former developed the *lubridate* package and has written many R-focused books, and the latter developed the *Tidyverse* packages, which arguably revolutionized R. In other words, these two are probably good resources to learn from.

Is it free?
Yes.

Link: https://r4ds.had.co.nz/

Tableau

What is it?
Tableau is a powerful and fast-growing data visualization tool used in many industries. It helps in simplifying raw data into the very easily understandable format. Data analysis is very fast with Tableau and the visualizations created are in the form of dashboards and worksheets.

Should I consider this?
While Tableau can be useful in data science and statistics, its use is also common in business, healthcare, marketing, and intelligence settings—just to name a few. Aside from its use in industry, the program is a very powerful tool for data visualization. Within a few weeks of use, you can become relatively proficient with the integral workings of Tableau.

Is it free?
Yes. Students at accredited academic institutions are offered free one-year Tableau licenses through the Tableau for Students program. Receive access to our entire eLearning suite once verified.

Tableau for Students: download program + gain access to eLearning suite upon verification
https://www.tableau.com/academic/students
https://elearning.tableau.com/

MATLAB

What is it?
MATLAB is a high-performance language for technical computing. It integrates computation, visualization, and programming in an easy-to-use environment where problems and solutions are expressed in familiar mathematical notation. Typical uses include: Math and computation.

Should I consider this?
Maybe, depending on your career interests. If you are interested in learning or having a career in science, mathematics (abstract or applied), engineering, computational biology, physics, or data-oriented finance, then yes, you should consider learning MATLAB.

Is it free?
Yes—UGA has campus-wide access. The MATLAB website also has free, interactive tutorials.

MATLAB for Students: https://www.mathworks.com/products/matlab/student.html

Coursera

What is it?
Coursera is a world-wide online learning platform founded in 2012 by Stanford professors Andrew Ng and Daphne Koller that offers massive open online courses, specializations, and degrees.

Should I consider this?
If you're looking to beef up your resume in regard to academic pursuits, listing a few completed courses, specializations, or certificates from Coursera could definitely show initiative. Aside from this, taking a few courses in an area or field you're interested in may help you in figuring out or narrowing down your academic and/or career trajectory.

Is it free?
Yes and no. There is typically a 7-day window where a course or specialization is free—however, not all courses grant you a certificate if you complete it in this time frame without paying. Financial aid is available and is almost always granted in full, so if there is a course you're interested in, apply ahead of time. If you're interested in a specialization, be sure to apply for financial aid for each course; you can copy and paste your responses for each part.

<p align="center">A few recommended courses/certifications:</p>

<p align="center">Machine Learning Specialization, University of Washington</p>

<p align="center">AWS (Amazon Web Services) Fundamentals Specialization, AWS</p>

<p align="center">Business Analytics Specialization, The Wharton School</p>

<p align="center">Developing Applications with Google Cloud Platform Specialization, Google Cloud</p>

<p align="center">Web Design for Everybody: Basics of Web Development & Coding, University of Michigan</p>

<p align="center">Excel to MySQL: Analytic Techniques for Business Specialization, Duke University</p>

<p align="center">Genomic Data Science Specialization, Johns Hopkins University</p>

<p align="center">Epidemiology in Public Health Practice Specialization, Johns Hopkins University</p>

<p align="center">Biostatistics in Public Health Specialization, Johns Hopkins University</p>

Online / Self-Guided Learning (unrelated to statistics)

Final Cut Pro

Final Cut Pro is complete video post-production studio available for Mac. It is one of the standard editing suites used in the film industry (think Parasite). It is also widely used in independent and documentary filmmaking. If you're trying to David Dobrik-yourself during quarantine, consider giving it a go.

Apple is offering a 90-day free trial. Click here for details.

Logic X Pro

Logic Pro is a digital audio workstation and MIDI sequencer software application for the macOS platform.

Apple is offering a 90-day free trial. Click here for details.

Ableton Live

Ableton Live lets you easily create, produce and perform music within one intuitive interface. Live comes with a versatile collection of instruments, sounds, kits and loops for creating any kind of music and provides a full complement of effects to tweak and process your sound.

Ableton is offering a 90-day free trial (for Mac *and* Windows). Click here for details.

Adobe Creative Suite

Photoshop, Lightroom, InDesign, Premiere – you name it: the Adobe Creative Suite is incredibly versatile and useful. Knowing your way around even one of its products

You can obtain access to the Adobe Creative Cloud for free through July 6th using the link below.

https://tinyurl.com/yc6uj4px

Rosetta Stone

Rosetta Stone is offering free 3-month memberships. Sign-up is through email, so if you really want to go crazy, you can probably get away with using your initial + numbers UGA email address and your full UGA email address separately to hold two subscriptions.

https://www.rosettastone.com/freeforstudents/

Duolingo

Pick up a new language for free! https://www.duolingo.com/

Maya

Maya is a professional 3D Animation Software used to create graphics—like Avatar movie-level graphics.

Maya grants student licenses for free, which is nice seeing that the animation suite costs $1,500+ each year otherwise. Autodesk offers some nice tutorials, but YouTube is a great resource here also.

https://www.autodesk.com/education/free-software/maya

Khan Academy

Khan Academy: the free-edu behemoth for free tutorials and interactive exercises. This may be an especially great resource if you're taking online math courses over the summer and are looking for additional guidance.

Not feeling up for math or science? Consider taking their course on Personal Finance, which covers a lot of ground including all-things credit and tax-related (a.k.a. the class everyone laments their high school chinced them out of—this is your chance!!).

Mathispower4u

Cheesy name (though arguably true), Mathispower4u has tutorials on topics ranging from diff eq to statistics to calculus. This may be an especially great resource if you're taking online math courses over the summer and are looking for additional guidance.

http://www.mathispower4u.com/

University Resources

UGA Library

We may not be able to physically access the library, but many of its services—including reaching out to a librarian!!—are available online.

Link to COVID-19 Library Resources and Services:
https://guides.libs.uga.edu/COVID19/students

In addition, students have access to many software products through Vlab, a virtual software suite hosted by UGA. Vlab supports Microsoft Office, STATA, SPSS, MATLAB, and more. You can log in using your MyID and password.

Access UGA's Vlab: https://www.libs.uga.edu/science/tutorials

GT Library

Go dawgs and everything, but it's worth noting that GT regularly hosts events on R, Python, etc.

Check out upcoming events here: http://library.gatech.edu/

MIT OpenCourseWear

MIT publishes all of the educational materials from its undergraduate- and graduate-level courses online, freely and openly available to anyone, anywhere.

Check it out here: https://ocw.mit.edu/index.htm

Career Prep

American Statistical Association Student Resources

Through the link below, you can access 3 recorded webinars: Job Search 101, Resume Tips, and Interviewing Skills, as well as three .pdf guides on Cover Letters, Resumes, and Interviewing.

https://ww2.amstat.org/virtualcareerservice/StudentResources.cfm

Strengthen Interview Skills

Looking to practice interviewing skills? Check out www.uga.biginterview.com! It's a great resource to practice your interviewing skills. You are able to customize the job type, interview questions, record your performance, and more. The service is free.

Events / Seminars

The Leadership Laboratory: Using Observational Study to Develop Leadership Skills for Statisticians with Dr. Gary Sullivan

When: June 16th (Tuesday) 12:00pm-1:30pm Eastern Time

Ideally, we'd like to screen-share this so that anyone can actively watch. However, if this is hosted over Zoom, we won't be able to and will share a recording once the lecture is over instead.

For more info on the lecture description and presenter, click here.

 Note: any additional events or webinars will be announced via Listserv and GroupMe.

Competitions

USCLAP

The Undergraduate Class Project Competition (USCLAP) aims at class projects conducted by undergraduate students in their statistics and data sciences courses at the introductory or intermediate level. Project submissions are a short report/paper (up to 3 pages in length).

Next submission deadline: Friday, June 26, 2020

Find out more info on the competition website.

USREP

The Undergraduate Research Project Competition (USRESP) is a competition for research projects conducted by undergraduate statistics and data science students. The research project competition is for undergraduate statistics and data science students who conduct research projects coming from activities like summer research projects, senior capstone course research projects, independent research projects (e.g., independent studies), Honor's college research projects, or extensions of class research projects.

Next submission deadline: Friday, June 26, 2020

Find out more info on the competition website.

ASA Student Paper Competitions

This year's deadlines have passed, but if you're looking to begin working on something research-related, consider tailoring it to be submitted to one of the ASA sections' student paper competitions. Most of the sections have deadlines in December, but it may be worth checking out ahead of time.

Find more details here.

Finding Data

U.S. Census Data

Access datasets from the U.S. Census here.

Kaggle

Kaggle is the world's largest data science community with powerful tools and resources to help you achieve your data science goals. Access their datasets here.

Harvard Dataverse

Find data across research fields, preview metadata, and download files through Harvard's Dataverse here.

Appen Open Source Datasets

Datasets curated on the Appen platform. Free to download for the entire data science and machine learning community. Inside each dataset, you'll find the raw data, job design, description, instructions, and more. Access these resources here.

data.world

data.world offers a free membership providing access to finding data and the ability to catalogue your own. Find out more here.