Welcome back to campus! We hope you’ve all had an amazing summer and are ready to get back into the swing of things. Here is the first issue of Volume 2 of our Newsletter! If you missed previous issues, make sure to check them out here.

Major Updates

Major Declaration Timeline

The application for the Data Science major is open from the 4th week of each term through the week after Finals, including during the Summer. Please submit your application no earlier than the last 3 weeks of the term in which you will complete your prerequisites.

Major Declaration Form Availability 2019-20:

- **Fall 2019**: Sept 16 - Dec 31, 2019
- **Spring 2020**: Feb 10 - May 22, 2020
- **Summer 2020**: June 15 - Aug 21, 2020

Fall 2019 Drop-In Advising

Major Advisors’ Drop-In Advising has started up again for the Fall 2019 semester! To view the schedule and to find info on how to check-in for drop-in advising, please visit our Student Services page.

Peer Advisors’ Drop-In Advising will be starting up soon, please stay tuned on our Peer Advising page. Current information reflects the Spring 2019 schedule but we will be updating it very soon. In the meantime, please email ds-peer-advising@berkeley.edu with any questions you might have for our Peer Advisors!

Don't forget to enroll in Data Science Connector Courses!

Connector courses are 2-unit courses that weave together core concepts and approaches from Data 8 with complementary ideas or areas. Along the way, students gain additional experience, broader insights, or deeper theoretical or computational foundations.
Offered by faculty across many departments and fields of study, connectors are optional but highly encouraged and are designed to be taken at the same time or after the Foundations course.

Check out some of our awesome Fall 2019 Connector Courses:

- **COMP SCI 88 001 - Computational Structures in Data Science**
  - Have you taken Data 8 or are signed up for this fall? Are you pumped for the DS major but pressed for time? Have you enjoyed programming and want to build complex programs? CS 88 is a 2 unit connector course that leverages the computing you learn in Data 8 and covers much of the material you would learn in CS 61A. CS 88 gives you a solid foundation for CS 61B, and significant programming experience you can leverage in other courses and projects. We will cover a variety of topics such as functional programming, data abstraction, object-oriented programming, and program complexity. These are foundational ideas in computer science which you’ll be able to apply to future learning in Data Science and Computer Science!

  These 2 units shouldn’t be taken lightly. It's a lot of material to cover, but we've got a team of enthusiastic, experienced TAs, awesome tutors, CSM staff, and enthusiastic lab assistants to help you on this journey. We expect Fall 2019 to be our best offering yet! Read more at cs88.org.

- **Data 88 001 - Economic Models**
  - This Data Science connector course will motivate and illustrate key concepts in Economics with examples in Python Jupyter notebooks. The course will give data science students a pathway to apply python programming and data science concepts within the discipline of economics. The course will also give economics students a pathway to apply programming to reinforce fundamental concepts and to advance the level of study in upper division coursework and possible thesis work.

- **Data 88 002 - Data Science in Genetics and Genomics**
  - Recent years have witnessed a rapid expansion in the creation and utilization of genetic and genomic data across diverse domains such as business, biological research, and medicine. In this Data 8 connector course we will survey relevant questions of interest and employ the methods frequently relied upon by analysts to derive insights from genetic and genomic data. Topics will include the comparison of DNA sequences, dimension reduction, the characterization of transcriptomes, and genome-wide association studies, among others. In addition to hands-on work with data, we will also consider the history of the genetic and genomic sciences and their intersection with current events, ethics, and modern medicine. Students should exit with an understanding of the central role played by data in the fields and an appreciation for the remaining challenges in light of ever-increasing degrees of personalization of, and access to, these sciences. No biological background is required.

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**Student Opportunities**

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**Rudd Family Foundation Big Ideas Contest**

**Big Ideas** is an annual contest aimed at providing funding, support, and encouragement to interdisciplinary teams of students who have “big ideas.” Since its founding in 2006, Big Ideas has inspired innovative and high-impact student-led projects aimed at solving problems that matter to this generation. By encouraging novel proposals and then supporting concrete
next steps, Big Ideas is helping contest winners make an impact all over the world.

The infrastructure of this contest is made possible through the generous support of the Andrew & Virginia Rudd Family Foundation.

Come to an info-session to learn more! Please see the flyer for location, dates, and times.

Applications are due November 20th, 2019!

Opportunity Through Data Fall Recruitment

Opportunity Through Data, a Big Ideas funded data science education initiative, is accepting applications! Our goal is to make data science more accessible to underrepresented communities. Members will focus on developing our curriculum activities and those interested will train to become teachers.

The deadline is September 13th, but we will be scheduling interviews on a rolling basis so apply ASAP! We will be hosting an info session on September 10th, 2019 in Wurster 106 from 7:30 to 8:30PM.

Website: https://opportunity-through-data.github.io
Application Link: https://forms.gle/piKMRZQfyrdTsYDGA

Schmidt Futures Associate Product Manager Program

Schmidt Futures recently opened the application for the next cohort of Associate Product Managers (APMs)! This unique program gives graduating seniors and recent graduates the opportunity to use their computer science skills to help solve major societal challenges, while receiving valuable mentorship from leaders in tech like Eric Schmidt and others. The deadline to apply is October 1st, 2019.

For more information on the program, as well as the link to the application, please visit schmidtfutures.com/apm.

If you have any questions, please reach out to apmapply@schmidtfutures.com.

I School’s New 5th Year Master of Information and Data Science Program

I School’s New 5th Year Master of Information and Data Science Program
The School of Information’s new 5th Year Master of Information and Data Science (5th Year MIDS) program is a one year online program tailored to prepare graduating seniors for data science careers. 5th Year MIDS offers a multidisciplinary curriculum drawing from computer science, sociology, economics, law, and business. Personalized career advising and project-based coursework helps graduates land jobs at employers including Google, Facebook, and Amazon in jobs such as data scientist, data engineer, and product manager. Learn more about the program, and apply by November 4 to waive your application fee. No GRE required.

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**Fall 2019 Courses**

**UGIS 82 - K-8 Teaching and Inquiry-Based Lesson Design in the Science and Mathematics Classroom (2 units)**

**When:** Tuesdays, Wednesdays, or Thursdays 4PM - 6PM  
**Where:** 340 Evans Hall

This course surveys basic approaches to K–8 science and math teaching through modeling inquiry-based teaching and discussion. Topics include inquiry-based pedagogy, assessment techniques, lesson plan design and revision, and child development. Students are placed in science and math learning environments with elementary and middle school children to practice teaching. This seminar offers an opportunity to explore teaching, foster children's natural curiosity, and inspire local students. The course also includes a field placement of 1 hour per week (12 hours total) with a teacher in a local K–8 classroom. Teaching experience is not required and course is open to all majors!

**Course Listing:** [https://classes.berkeley.edu/content/2019-fall-ugis-82-004-sem-004](https://classes.berkeley.edu/content/2019-fall-ugis-82-004-sem-004)  
**Relevant Website:** [http://calteach.berkeley.edu/cal-teach-program/courses.php](http://calteach.berkeley.edu/cal-teach-program/courses.php)

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**Upcoming Events**

Data Science Society Information Sessions

Data Science Society @ Berkeley, UC Berkeley's first Data Science focused student organization, is recruiting! Come out to our "Meet the Society" event on Thursday, September 5 from 7 - 9PM at the Free Speech Movement Cafe Patio, where you will get to meet the other members and hear about our amazing experiences in the organization.

**Application Link:** [tinyurl.com/dssfall19app](http://tinyurl.com/dssfall19app)
Sessions

The Global Poverty & Practice (GPP) minor is an interdisciplinary program designed to introduce students to the theoretical frameworks, methods, and practical skills necessary to engage with global poverty and inequality in effective ways. The "Practice Experience" is a central component of the minor in which students partner with organizations engaged in poverty action (e.g., non-governmental organizations, community organizations, government agencies, and other poverty or development programs). In conjunction with the coursework, this real world experience, which can take place domestically or internationally, allows students to connect theories and practices of poverty action. Students from all disciplines are encouraged to undertake the minor.

If you’re interested in the minor, come and check out our Fall 2019 Info Sessions! Please see the attached flyer for location, dates, and times.

Synthesis:
Interdisciplinary Collaboration in Computational Music Research

Saturday, September 28 | 9 AM - 6 PM | UC Berkeley’s Center for New Music and Audio Technology (CNMAT)

Berkeley Computational Music Research (BCMR) invites you to its first annual conference.

The deluge of computational techniques developed over the last decade has had a transformative impact in all areas of academic and industrial research. The goal of this conference is to explore potential applications for the integration of these techniques into interdisciplinary music research. This year’s theme, synthesis, emphasizes interdisciplinary collaboration, bringing together scholars with interests in music studies and computational methods. It encourages music researchers and computer scientists to initiate dialogue that will provide radical new insights into the most pressing questions across disciplines.

Breakfast and lunch will be provided. Space is limited to 40 participants, so RSVP is required.

To sign up, fill out this google form. For more information, check out our website or contact BCMR@berkeley.edu.