

Michael Ball | Curriculum Vitae

San Francisco, CA

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Education

University of California, Berkeley

MS Computer Science, Advisor: Dr. Daniel Garcia
Thesis: Lambda: An Autograder for Snap!

Berkeley, CA

2016

University of California, Berkeley

BA Computer Science

Berkeley, CA

2015

Research Interests

o Computer Science Education

I am most experienced in high school, CS0 and CS1 courses. I am particularly interested in exploring and improving structural issues in courses, such as sound principles for course policies, teaching with teams and effective use of education technology.

o Digital Accessibility

I have experience building tools for software teams to improve the accessibility of web applications. I'm interested in improving methods for automatically detecting accessibility defects and recommending corrections. I am also interested in building accessible CS courses, and materials to teach accessibility to students.

Positions

UC Berkeley EECS

Lecturer

Berkeley, CA

Fall 2019 - Present

I am primarily responsible for Computer Science 88, an introductory "CS 1" course for data science students. I share the work in many of our activities for training student instructors, including teaching our pedagogy courses and advising summer instructors.

Gradescope, by Turnitin

Software Engineer

Berkeley, CA

July 2016 – Present

Gradescope is an online platform for grading written work (like exams) that allows instructors to provide detailed feedback while reducing grading time. We were a small team of less than 15 before being acquired by Turnitin in October 2018.

- Led the development of web accessibility. Addressed technical concerns relating to compliance with WCAG 2.0 and 2.1. Set up tooling for automated front-end tests for accessibility, and trained engineers on web accessibility. Presented my web accessibility work to the Turnitin Engineering organization.
- Led the development of growth engineering. Created modern data pipelines (hosted on Amazon Web Services) to address user onboarding and to better understand product usage.
- Collaborated with the design team on new features. Provided customer support and training on the Gradescope platform.

UC Berkeley EECS

Researcher and Engineer

Berkeley, CA

2016-2018

Contributed to the Beauty and Joy of Computing edX course, including supporting the development of the Snap! programming language, and provided support to high school computer science teachers. (Part-time; Funded via Hopper-Dean Foundation Grant) (See "Projects".)

Teaching

University of California, Berkeley

- **Fall 2021** Co-Instructor, CS169A: Engineering Software as a Service
- **Fall 2021** Instructor, CS88: Computational Structures in Data Science
- **Fall 2021** Instructor, CS294-188: Design & Evaluation of CS at Scale ("Teaching Task Force")
- **Spring 2021** Instructor, CS195: Social Implications of Computer Technology
- **Spring 2021** Co-Instructor, CS169L: Software Engineering Team Project
- **Spring 2021** Co-Instructor, CS88: Computational Structures in Data Science
- **Fall 2020** Co-Instructor, CS169A: Engineering Software as a Service
- **Fall 2020** Instructor, CS88: Computational Structures in Data Science

- **Fall 2020** Instructor, CS294-188: Design & Evaluation of CS at Scale ("Teaching Task Force")
- **Spring 2020** Co-Instructor, CS195: Social Implications of Computer Technology
- **Spring 2020** Co-Instructor, CSW186: (Online) Introduction to Databases
- **Spring 2020** Co-Instructor, CS88: Computational Structures in Data Science
- **Fall 2019** Instructor, CS88: Computational Structures in Data Science
240 Students, 8 TAs
- **Fall 2019** Instructor, CS169: Engineering Software as a Service
120 Students, 3 TAs
- **Fall 2019** Instructor, CS375: Computer Science Pedagogy Seminar
80 Students, 1 TA
- **Summer 2015** Co-Instructor, CS10: The Beauty and Joy of Computing
Instructor of Record for 60 students and 6 staff members. I oversaw all aspects of the course and gave lectures.
- **Spring 2015** Head-TA, CS10: The Beauty and Joy of Computing
- **Fall 2014** Head-TA, CS10: The Beauty and Joy of Computing
- **Spring 2014** Head-TA, CS10: The Beauty and Joy of Computing
I lead teams of 10-15 TAs and 8-12 graders each semester, overseeing staff training, running meetings and gave guest lectures.
- **Fall 2013** TA, CS10: The Beauty and Joy of Computing
- **Spring 2013** TA, CS194-23: The Art & Science of Digital Photography
A technical photography seminar course with 20-30 students. I gave lectures, graded coursework and contributed to course design.
- **Spring 2013** TA, CS10: The Beauty and Joy of Computing
- **Fall 2012** TA, CS10: The Beauty and Joy of Computing
I led two sections of 30 students each semester, contributed exam questions, wrote assignment specifications and led review sessions.

Awards

- UC Berkeley Lecturer Teaching Fellows, 2019-2020
Year-long project on Parsons Puzzles in intro CS courses.
- Best Lightning Talk Award, 49th ACM Technical Symposium on Computer Science Education, 2018
Awarded for the lightning talk "IRT In 5 minutes".
- Eugene L. Lawler Prize, UC Berkeley EECS, 2015
The Lawler Prize honors computer science undergraduates from disadvantaged groups (such as the disabled community and ethnic minorities) or a person who has surmounted unusual difficulties in pursuing a degree with demonstrated academic effort. This prize was established by the UC Berkeley Computer Science Division to honor the memory of colleague, Professor Eugene L. Lawler, who was an internationally recognized expert in mathematical theories of scheduling and resource allocation. <https://www2.eecs.berkeley.edu/Students/Awards/#11>
- EECS Distinguished Graduate Student Instructor Award, 2015
Faculty nominate the top nine percent of UC Berkeley EE or CS GSIs and Group Tutors from the semesters of the previous calendar year. From these, the EECS Student Awards committee selects one top EE and one CS GSI for the departmental award. Because EECS is a large department with about 180 GSIs per semester, it is a great honor to be selected as an Outstanding GSI. <https://www2.eecs.berkeley.edu/Students/Awards/#13>

Grants and Gifts

- UC Berkeley Presidential Chair Fellows (2021-2022) Fox, Pamela, **Ball, Michael**
- Teach Access Grants (2021), \$5,000 **Ball, Michael**
Adding accessibility content to CS169A
- NSF EAGER, Student Mission Control for the International Space Station (2021), \$298,944, Research Engineer (Dan Garcia co-PI) Funding to support development of an API, website, "Student Mission Control" interface, and curriculum modules centered on the data streaming out of the International Space Station. NSF Award #2027260
- UC Berkeley College of Engineering, Course Adaptation and Remote Delivery, Learning, and Assessment: Developing Question Generators and MOOC-like videos & quizzes for remote CS61C, CS10, and CS169A (2020), \$60,000, Dan Garcia co-PI Funding to build Question Generators and MOOC-like videos and quizzes for CS61C and CS10 for remote

delivery, learning, and assessment.

- Hopper-Dean Foundation, Accelerating CS Diversity Programs Fund (2019), \$600,000, Dan Garcia PI The foundation granted \$3M to the department to fund diversity initiatives; Summer salary was used to support our middle school curriculum, Spanish translation, software development and staff.
- Hopper-Dean Foundation (\$200,000). 2016. Researcher. (Daniel Garcia, PI.) For the support of diversity initiatives in CS to support high schools nationwide. The High School Initiative focuses on high school computer science teachers, led by Professor Dan Garcia. In response to NSF Program Manager Jan Cuny's charge to change the face of computing by engaging and preparing 10,000 teachers to teach computer science courses, Professor Garcia and colleagues have developed our non-major computer science class CS10: The Beauty and Joy of Computing (BJC) into a course that is fully aligned with high school Academic Placement (AP) specification. The plan is to accomplish this objective via an edX Small Private Online Course (SPOC) experience, with the high school teacher in control. The course recently received national exposure when it had more women than men in an intro CS course for the first time since records were digitized.
- Google CS Engagement Award (\$5,000). 2015. Michael Ball. This gift from Google was used to support CS10 and The Beauty and Joy of Computing. The funds have been used to develop Snap! enhancements and help fund the Snap! Cloud infrastructure.
- Google's 3X in 3 Years (2015), \$900,000, Student Researcher Authored By Dan Garcia. Funding to the department for 3-year project to grow undergraduate capacity and support diversity via our "Scaling Computer Science through Targeted Engagement" project. The three objectives are (1) Decrease the intro GPA gap between experienced and inexperienced students by 50%, (2) Increase Software Engineering and UI Design enrollment by 500 total students/year, and (3) Increase the number of women and underrepresented minority CS majors by a factor of 3.
- NSF STEM-C BJC4NYC: Bringing the Beauty and Joy of Computing to the Largest School System in the US (\$7,874,876). 2014. Consultant. For the development of curricular materials, based on the Beauty and Joy of Computing, for teaching CS Principles at the high school level using the Snap! programming language. Development of the Snap! language, including the cloud back-end, and BJC curriculum software. During the project, 100 high school teachers in New York City were trained to teach BJC, and early participants become teacher-trainers who worked with later participants. The teachers involved become part of a Community of Practice that continues to provide support for the teacher cohorts. I worked with EDC curriculum developers to review and suggest changes, developed BJCx (with auto-grading features) for teachers as a small private online course (SPOC), and (3) supported BJC teachers online.
- edX (\$50,000). 2014. Staff. For the development of BJCx, a Computer Science Principles edX MOOC to be offered (1) as a

synchronous Small Private Online Course (SPOC) for high schools, (2) a synchronous open-to-all MOOC for others, and (3) an asynchronous self-study course. The development concluded in creating four sub-MOOCs, which together was the sum of the BJC offering. I supported Snap! cloud integration, developed autograding (remote grading of Python and Snap! assignments and lab activities in a remote server) and an automated lab content builder, and supported BJC students and teachers in an online forum.

Service

Professional Service

- 2021:** Snap!shot 2021 Mini-Conference Co-Organizer; Technical Lead, December 2021
- 2021:** Snap!Con 2021 Co-Organizer; Technical Lead
- 2021:** SIGCSE Technical Symposium Publicity Co-Chair
- 2021:** SIGCSE Technical Symposium Associate Program Chair / Senior Reviewer "Experience Reports and Tools"
- 2020:** Snap!shot 2020 Mini-Conference Co-Organizer; Technical Lead
- 2020:** Snap!Con 2020 Co-Organizer; Technical Lead
- 2020:** SIGCSE Technical Symposium Publicity Co-Chair
- 2018-2020:** SIGCSE Technical Symposium Computer Science Principles Providers and Teachers Forum Co-Organizer
This forum was launched because there had been no formal face-to-face community for providers and teachers of CSP to discuss best practices, feedback, or share teaching experiences at SIGCSE.
- 2016 - 2020:** SIGCSE Technical Symposium Reviewer
- 2018:** SIGCSE Technical Symposium Photography Chair

Institutional Service

- 2020 - 2022:** EECS Department Student Grievances Committee, CS Chair
- 2021 - 2022:** UC Berkeley: Research Teaching & Learning Faculty Advisory Committee, Co-Chair
- 2020 - 2021:** UC Berkeley: Disabled Students Program Faculty Advisory Committee, Member
- 2020 - 2021:** UC Berkeley: Research Teaching & Learning Faculty Advisory Committee, Member
- Winter 2020 - 2021:** UC Berkeley Working Group: Online Proctoring Policies, Member
- Spring 2020:** UC Berkeley Working Group: Best Practices for Remote Exams, Member

2016: UC Berkeley EECS Graduate Student Instructor Survey Presentation for Faculty

2014-2015: UC Berkeley EECS Undergraduate Study Committee, Student Member

Students Supervised

- o May 2021, Alex Kassil
- o May 2020, Mansi Shah 2nd Reader, *primary advisor Dan Garcia*

Writing & Publications

Invited Talks & Guest Lectures

- o **Ball, Michael** and Garcia, Daniel. Online Learning (Talk). University of Washington CS Education Seminar, Online, 2020-05-28.
- o **Ball, Michael** and Garcia, Daniel. Mastery Learning at Scale (Talk). University of Washington CS Education Seminar, Online, 2020-06-04.

Conference and Workshop Presentations

- o Walther, Kendra; Blank, Adam; **Ball, Michael**; Rampure, Suraj. A new class of Teaching-Track Faculty: No Ph.D. required (Panel). SIGCSE 2022 To Appear.
- o Garcia, Daniel; **Ball, Michael**; Garcia, Yuan; Snap! 7 – microworlds, scenes, and extensions! (Demo). SIGCSE 2022 To Appear.
- o **Ball, Michael**; Mock, Lauren; Garcia, Daniel; Barnes, Tiffany; Hill, Marnie; Fries, Mary; Fox, Pamela. Beauty and Joy Computing: AP CS Principles & Middle School Curriculum (Workshop). SIGCSE 2022 To Appear
- o Blank, Adam; Walther, Kendra; **Ball, Michael**; Teaching Track Faculty with a Masters-Only BOF. Tapia 2021 To Appear
- o Mönig, Jens; Romagosa, Bernat; Harvey, Brian; **Ball, Michael**; Hügler, Jadga. What Might Be the Future of Snap!?! (Panel) Snap!Con 2021. Online
<https://www.snapcon.org/conferences/2021/program/proposals/295>
- o Garcia, Daniel; Gelosi, Deanna; Fries; Mary; Fox, Pamela; **Ball, Michael**. BJC Middle School 1.0 (Panel) Snap!Con 2021. Online.
<https://www.snapcon.org/conferences/2021/program/proposals/277>

- **Ball, Michael**; DeOrio, Andrew; Hsia, Justin; Blank, Adam. Teaching TAs to Teach: Strategies for TA Training. (Panel) In SIGCSE '21: Proceedings of the 52nd ACM Technical Symposium on Computer Science Education March 2021, pp 461–462
<https://doi.org/10.1145/3408877.3432579>
- Kassil, Alex; **Ball, Michael** Active Academic Integrity (Poster). in SIGCSE '21: Proceedings of the 52nd ACM Technical Symposium on Computer Science Education March 2021
<https://doi.org/10.1145/3408877.3439674>
- **Ball, Michael**; Garcia, Daniel; Arvai, Eric. 2021. Effective Video Production for Online and In-Person Courses (Workshop). in SIGCSE '21: Proceedings of the 52nd ACM Technical Symposium on Computer Science Education.
<https://doi.org/10.1145/3408877.3432509>
- Lin, Kevin; Battestilli, Lina; **Ball, Michael**. Strategies for Authentic Assessments of Mastery in CS Courses (Birds of a Feature) in **Snap!** Proceedings of the 52nd ACM Technical Symposium on Computer Science Education March 2021
<https://doi.org/10.1145/3408877.3439504>
- Hill, Marnie; Garcia, Daniel; Barnes, Tiffany; Mock, Lauren; **Ball, Michael**; Isvik, Amy; Bell, Dave. Teaching with the Beauty and Joy of Computing – AP CSP and More! (Workshop) in Proceedings of the 52nd ACM Technical Symposium on Computer Science Education (SIGCSE '21).
<https://doi.org/10.1145/3408877.3432507>
- Jens Mönig, Brian Harvey, Joan Guillén, Jadga Hügle, **Ball, Michael**; Bernat Romagosa, The Future of Snap! (Panel) Snap!Con 20202, Online.
<https://www.snapcon.org/conferences/2020/program/proposals/35>
- Garcia, Dan; **Ball, Michael**. 2020. Snap! v5, Our Biggest, Feature-filled Release Ever! (Demo) In Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20). Association for Computing Machinery, New York, NY, USA, 1417.
<https://doi.org/10.1145/3328778.3372549>
- **Ball, Michael**, Lauren Mock, Dan Garcia, Tiffany Barnes, Marnie Hill, Alexandra Milliken, Joshua Paley, Efrain Lopez, and Jason Bohrer. 2020. The Beauty and Joy of Computing Curriculum and Teacher Professional Development (Workshop). In Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)
<https://doi.org/10.1145/3328778.3367029>
- **Ball, Michael**; Hsia, Justin; Pon-Barry, Heather; DeOrio, Andrew; Blank, Adam. Teaching TAs To Teach: Strategies for TA Training (Panel). SIGCSE '20: Proceedings of the 51st

ACM Technical Symposium on Computer Science Education February 2020
<https://doi.org/10.1145/3328778.3366987>

- **Ball, Michael**; Jatzlau, Sven; Snap!Con 2019 Lightning Talk: An Analysis of 500,000 Snap!Projects
- **Ball, Michael** Snap!Con 2019 Lightning Talk Using JSFunction with the Wolfram Alpha API
- Moënic, Jens; Romagosa, Bernat; **Ball, Michael**; Harvey, Brian; The Future of Snap! (Panel). SnapCon! 2019
- **Ball, Michael**; Snap! A Look at 550K Projects. Poster. Snap!Con 2019, Heidelberg, Germany.
- **Ball, Michael**; What's New in Snap!5? Poster. Snap!Con 2019, Heidelberg, Germany.
- **Ball, Michael**; A Look at 6 Years of the Snap!Cloud Snap!Con 2019, Heidelberg, Germany.
- **Ball, Michael**; Romagosa, Bernat; Moenic, Jens; Harvey Brian. Snap! A Look at 5 Years, 250,000 Users and 2 Million Projects. Poster. Proceedings of the 50th ACM Technical Symposium on Computer Science Education.
- Mock, Lauren; **Ball, Michael**; Garcia, Daniel; Barnes, Tiffany. 2019. Computer Science Principles Providers and Teachers Forum (Pre-Symposium Workshop). In Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19). Association for Computing Machinery, New York, NY, USA.
- **Ball, Michael** Teaching Accessibility Using Software. What to Teach about Accessibility SIGCSE 2019 Pre-Symposium Event.
- **Ball, Michael**. IRT in 5 Minutes: Easy Ways to Better Understand an Assessment. Lightning Talk. Proceedings of the 49th ACM Technical Symposium on Computer Science Education. <http://doi.acm.org/10.1145/3159450.3162211>
- Galanos, Ria; **Ball, Michael**; Dougherty, John; Hummel, Joe; Malan, David. Technology We Can't Live Without!, Revisited. Panel. Proceedings of the 49th ACM Technical Symposium on Computer Science Education. <http://doi.acm.org/10.1145/3159450.3159629>
- Milliken, Alexandra; **Ball, Michael**; Mock, Lauren. AP CS Principles and The Beauty and Joy of Computing Curriculum: Workshop. Proceedings of the 49th ACM Technical Symposium on Computer Science Education. <http://doi.acm.org/10.1145/3159450.3162375>
- Garcia, Daniel; Harvey, Brian; Mönig, Jens; **Ball, Michael**; Romagosa, Bernat; Low, Robert;

Mock, Lauren. The Beauty and Joy of Computing. Workshop. Scratch Conference 2017, Bordeaux, France, 2017-07-21.

- **Ball, Michael**; Garcia, Daniel; Mock, Lauren. Writing Autograders for Snap! and Integrating them Into Your Course. Short Talk, Scratch Conference 2017, Bordeaux, France, 2017-07-20.
- Garcia, Daniel; Harvey, Brian; Mönig, Jens; **Ball, Michael**; Mock, Lauren; Low, Robert; Romagosa, Bernat. The Beauty and Joy of Computing and the Snap! Programming Language. Poster. Scratch Conference 2017, Bordeaux, France, 2017-07-20.
- **Ball, Michael**; Garcia, Daniel; Mock, Lauren. Early Analysis of "In-Lab" Autograding for Snap!. Poster. Scratch Conference 2017, Bordeaux, France, 2017-07-20.
- Mock, Lauren; **Ball, Michael**; Garcia, Daniel; Harvey, Brian. Lessons Learned Delivering a Customizable Course with Autograders to 200 Teachers. Ignite Talk. Scratch Conference 2017, Bordeaux, France, 2017-07-20.
- Garcia, Daniel; Romagosa, Bernat; **Ball, Michael**; Mönig, Jens; Harvey, Brian. Programming the Internet (of things) with Snap!. Short Demo. Scratch Conference 2017, Bordeaux, France, 2017-07-19.
- **Ball, Michael**. Writing Autograders for Snap! and Integrating Them Into Your Course. Demo. Proceedings of the 48th ACM SIGCSE Technical Symposium on Computer Science Education. <http://doi.acm.org/10.1145/3017680.3022385>
- **Ball, Michael**. Implementing "In-Lab" Autograding for Snap!. Poster. Proceedings of the 48th ACM SIGCSE Technical Symposium on Computer Science Education. <http://doi.acm.org/10.1145/3017680.3022443>
- Garcia, Daniel and **Ball, Michael**. Bringing the Beauty and Joy of Computing to the World via edX: An Experience Report. Panel. Scratch Conference 2016, Cambridge, MA, 2016-08-05.
- **Ball, Michael** and Garcia, Daniel. Autograding and Feedback for Snap!: A Visual Programming Language. Poster. Proceedings of the 47th ACM Technical Symposium on Computing Science Education. <http://doi.acm.org/10.1145/2839509.2850572>
- Garcia, Daniel; Barnes, Tiffany; **Ball, Michael**; Biga, Emil; Paley, Josh; Hill, Marnie; Mattix, Nathan; Safa, Parisa; Morris, Sean; Kenner, Shawn. AP CS Principles and The Beauty and Joy of Computing Curriculum. Workshop. Proceedings of the 47th ACM Technical Symposium on Computing Science Education. <http://doi.acm.org/10.1145/2839509.2844714>

- **Ball, Michael**. Using Instant Chat for Fun and for Profit to Run a Large Class. Abstract Only. Proceedings of the 47th ACM Technical Symposium on Computing Science Education. <http://doi.acm.org/10.1145/2839509.2850526>
- Garcia, Daniel; Harvey, Brian; Moenig, Jens; **Ball, Michael**. The Beauty and Joy of Computing. Workshop. Scratch 2015, Amsterdam, Netherlands, August 12-16, 2015.
- Garcia, Daniel; Harvey, Brian; Moenig, Jens; **Ball, Michael**. Bringing the Beauty and Joy of Computing to the World via edX. Special Session. Scratch 2015, Amsterdam, Netherlands, August 12-16, 2015.
- Garcia, Daniel; Harvey, Brian; Moenig, Jens; **Ball, Michael**. The Beauty and Joy of Computing and the Snap! Programming Language. Poster. Scratch 2015, Amsterdam, Netherlands, August 12-16, 2015.
- **Ball, Michael**; Mock, Lauren; McKinsey, Jonathan; Machardy, Zachary; Garcia, Daniel; Titterton, Nathaniel; Harvey, Brian. Oh, Snap! Enabling and Encouraging Success in CS1. Poster. Proceedings of the 46th ACM Technical Symposium on Computer Science Education. <http://doi.acm.org/10.1145/2676723.2691947>
- Garcia, Daniel; **Ball, Michael**; Parikh, Aatash. L@S 2014 Demo: Best Practices for MOOC Video. Demo+Paper. Proceedings of the First ACM Conference on Learning @ Scale Conference. <http://doi.acm.org/10.1145/2556325.2567889>

Other Writing

- Engineering Software as a Service. 2nd. Edition Fox, Armando. Contributed Book Chapter on Accessibility. <https://saasbook.info>
- *AUTOGRADING FOR SNAP!* Hello World Magazine, Issue 3, Autumn 2017 https://magazines-static.raspberrypi.org/issues/full_pdfs/000/000/004/original/HelloWorld03.pdf
- "Where are the Practical Computing Classes?" The Daily Californian, Op-Ed Jan. 31, 2014 <https://www.dailycal.org/2014/01/31/practical-computing-classes/>

Theses

- **Masters Thesis, 2016:** *Lambda: Autograding For Snap!*
Lambda is an autograding platform for Snap!, a blocks-based programming language. As an undergraduate, I contributed to designing the system, architecting code, and creating autograder tests for student projects. During my Master's Project, I created a server-side component for the autograder to support using LTI (Learning Tools Interoperability), an open educational standard,

which allowed embedding the autograder into UC Berkeley's LMS. The autograder was used to trial a series of in-lab exercises, in comparison to the oral lab check-off questions students were answering.

<http://www2.eecs.berkeley.edu/Pubs/TechRpts/2018/EECS-2018-2.pdf>

Media and News

- o NPR: *Adding 'Beauty And Joy' To Obama's Push For Computer Science Teaching*. 2016-01-14.
<https://www.npr.org/sections/ed/2016/01/14/462954645/adding-beauty-and-joy-to-obamas-push-for-computer-science-teaching>

Software Projects

Snap!

Snap! is a blocks-based visual language designed to make teaching computer science easy, while exposing hard concepts like lambdas, recursion, and web APIs. I contribute to the core IDE, and I collaboratively designed, built and maintain the Snap! cloud-based project infrastructure, which currently supports more than 5 million projects and over 500,000 users.

<https://snap.berkeley.edu>

The Beauty and Joy of Computing

BJC is a university-level non-majors or a high school level AP Computer Science Principles course designed to broaden participation in computing. In addition to programming, the course emphasizes the context and implications of computing. I provide infrastructure maintenance, technical consulting and curriculum review. I contributed curriculum heavily to early versions of the course which are still used at UC Berkeley.

<https://bjc.berkeley.edu>

Alonzo, A Staff Chatbot

"Alonzo" is the name of a chatbot that course staff use to automate grading processes, saving time and reducing errors. The bot has been an integral part of enabling CS10 to facilitate in-class oral lab check-offs by allowing Lab Assistants to easily enter check off data. The bot was originally started as a fun side project, but has since had multiple generations of TAs contribute to and maintain its code.

<https://www.github.com/cs10/Alonzo>

Downshift

Downshift is an open source React Component maintained by PayPal. I contribute accessibility enhancements and reviews.

<https://github.com/paypal/downshift>

Technical Skills

Programming Languages: Snap!, JavaScript, Ruby, Python, SQL, bash, CSS, HTML

Development Tools: Agile Development, git, React, accessibility testing and compliance, PostgreSQL, Amazon Web Services, Heroku, Terraform, Software testing, continuous integration

Previous Languages: Java, C, C++, Apex, MATLAB, MIPS, scheme

Media Software: Final Cut Pro X, Adobe Creative Suite, Advanced Zoom programming

References

o Teaching Professor Dan Garcia
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(510) 642-5775

o Associate Teaching Professor Josh Hug
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o Senior Lecturer SOE Emeritus Brian Harvey
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o Professor Armando Fox
fox@berkeley.edu

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