

## Introducing the first edition of the CMU K-12 Educational Outreach Newsletter!

Greetings Carnegie Mellon University campus contacts! The Office of the Assistant Vice Provost for Educational Outreach has compiled the information for this newsletter to serve as a new method for collaboration across campus partners. We hope that you will enjoy reading about the upcoming events and details from programs, departments, schools and colleges at our university and how they're connecting with the K-12 community! Subsequent issues of this newsletter will be sent out to our contacts on a monthly or bi-monthly schedule as we [receive news and updates](#).

Should you choose to be removed from this periodic newsletter, we will be sad to see you go, but you may do so by scrolling to the bottom of this newsletter, and selecting to either [update your preferences or unsubscribe](#).

### September 2019 Headlines

- [Gelfand Outreach Saturday Series Classes for K-9th Grade Students](#)
- [CMU CS Academy](#)
- [CMU Student Employment Opportunities in the K-12 Community](#)
- [Women@SCS's TechNights Begin September 30th](#)
- [Ongoing K-12 Opportunities for Faculty](#)
- [ETC & Simon Initiative - Educational Research, Engagement, and Partnership Opportunities at Museum Lab](#)
- [Now Registering for K-12 Saturday Architecture Workshops](#)
- [MLK, Jr. Day Writing Competition](#)
- [Inventory of CMU Engagement Activities](#)

Our CS1 curriculum, an online interactive textbook that teaches foundational programming through Python with graphics and animation is now publicly available as a free resource to any classroom that would like to use it. This school year is off to a great start with CMU CS Academy's CS1 in over 300 classrooms across the globe! This is a great first course for students at the high school level aiding in the transition from block-based to text-based coding. If your school is interested in using it, teachers and administrators can [sign up here](#).



**Carnegie Mellon University**  
Entertainment Technology Center

**Educational Research, Engagement, and Partnership Opportunities  
at the MuseumLab**

The Simon Initiative is working with the Entertainment Technology Center (ETC) and the University of Pittsburgh to develop new projects and collaborations in the [MuseumLab](#) on the North Side. Delivering exceptional museum programming, the MuseumLab is the newest addition to the Children's Museum of Pittsburgh where kids 10+ can have cutting-edge and hands-on experiences in art, technology, media, and more. Originally commissioned by Andrew Carnegie as the first free public library in the country, the MuseumLab space has been newly renovated to reveal the 1890s architecture in a "beautiful ruin." Located adjacent to the Children's Museum, MuseumLab is home to three exhibit spaces, two learning labs, programming space, a host of commissioned artwork, and multiple partner organizations focused on serving children including CMU's ETC. The Manchester Academic Charter School has also found a new home for their middle school on the upper levels of the MuseumLab.

Creation of the MuseumLab makes Pittsburgh's Children's Museum the largest cultural campus for children in the country. Museum Lab builds on the Children's Museum's three decades of community development investments in its North Side neighborhood, helping to prepare the workforce of the future and creating new opportunities to conduct robust learning research that informs the national conversation on education. Both CMU and University of Pittsburgh have space in this beautiful building allowing for the opportunity to engage with the rich and vibrant Northside community, and with one another, in new ways. We continue to seek out on-campus partners in educational and learning sciences research. If you have a current or prospective learning science education research project and would like to know more about how to connect with CMU's educational research community, please do contact us ([Simon Initiative](#) / [ETC](#)).

Visit Museum Lab to explore freely available technologies, including Another Alice Adventure - a Windows-based platform for creating browser based adventure games. Visit us online for more information and for the [free software download](#).

If you have questions or ideas about becoming involved, please don't hesitate to reach out to us ([Simon Initiative](#) / [ETC](#)).

**Women@SCS**

Women@SCS will hold TechNights beginning September 30th, which are held weekly Mondays from 7 to 8:30pm in the Gates-Hillman Center. This outreach program exposes local middle school girls to creative technologies via accessible presentations and fun hands on activities run by undergraduate and graduate students at SCS. TechNights aims to engage and

and is sponsored this year by Duolingo. Please check out our [website](#) for more information or email [Liv.Zane](mailto:Liv.Zane), the Women@SCS Outreach Programs Manager.

# Carnegie Mellon University

## Leonard Gelfand Center

*Since 2007, the Leonard Gelfand Center for Service Learning and Outreach has worked with CMU faculty, students and staff through on-campus and community-based activities that improve educational opportunities for K-12 students.*



[Fall 2019 Registration](#) is **NOW OPEN!**

These STEM classes are for students in grades K-9 and are all hands-on, challenging and FUN!

Fall Series Saturday morning workshops are held on CMU's campus on the following dates:

September 28th

October 12th

November 2nd

### CMU Student Employment Opportunities in the K-12 Community

**Did you know that the Leonard Gelfand Center hires more than 30 CMU students annually to support K-12 initiatives?** We're hoping to double that number this academic year and spread our reach in the community! Consider posting our [job flyer](#) or sending it to students who may have an interest in K-12 educational outreach! Work study positions are available!

#### LGC Tutoring @ CMU

Over the past decade, the Leonard Gelfand Center has supported local K-12 schools and after school programs via the LGC Tutoring program. This program provides opportunities for CMU students to share their expertise and passion for learning with children in the community. A Former tutor shared the following quote regarding his tutoring experience:

"I would like to extend my sincerest thanks for the opportunity to work at the LGC during my time at CMU. The speaking skills, communication abilities, and confidence that I built over the years as an LGC employee have been invaluable. I will never forget how impact the experience of teaching and tutoring has been on my own personal development." C. Breze, SciTech Tutor 2014-2018.

**Tutoring positions are available now and are currently posted on Handshake**

providing services at any given location. Opportunities vary by location from a traditional tutoring role to a more specialized teaching assistant role. Schedules are planned on a case by case basis to ensure the best match for tutors and also site partners. We have a number of different partner sites and are developing new relationships each year to expand [this program](#).

### LGC STEM Ambassadors

The Gelfand Center is seeking undergraduate students to serve as Gelfand STEM Ambassadors to teach K-12 students about science, technology, engineering or mathematics subjects and research through hands-on activities, demonstrations, tours and other fun learning activities conducted in community centers, schools and on Carnegie Mellon's campus.

Initially, STEM Ambassadors will participate in paid weekly professional development programs to learn how to present a variety of STEM-focused lessons and demonstrations. These sessions will also include information about working with children of different ages. STEM Ambassadors will also design new demonstrations and hands-on activities. STEM Ambassadors will be invited to participate in programs as they are scheduled.

**Learn more about the STEM Ambassador opportunity by contacting [Dr. Judith Hallinen](#) directly.**

---

### K-12 Opportunities for Faculty

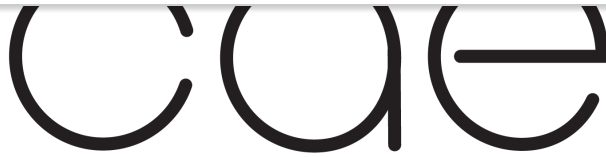
The Office of the Assistant Vice Provost for Educational Outreach and Leonard Gelfand Center have ongoing initiatives to enable faculty members to engage in the K-12 community. [Partner with us](#) to help make an impact in the K-12 community and learn more about broader impacts below.

#### Broader Impacts

We assist faculty with the development and implementation of individualized Broader Impacts strategies for proposals submitted to the National Science Foundation and other funders. Contact the Assistant Vice Provost to learn about programs and activities that are already in place or to discuss the development, implementation and evaluation of a new event for sharing information about your research with the community.

For faculty who are exploring K-12 programs, we can coordinate a focus group meeting with educators who can help to ensure that your ideas are aligned with the content taught in schools and are offered at the most appropriate grade level.

For more information, contact the [Office of the Assistant Vice Provost for Educational Outreach](#).



## Center for Architecture Explorations

### [Fall 2019 Architecture Workshops for K-12 Students](#)

#### Presented by the Center for Architecture Explorations

##### **INFLUENTIAL ARCHITECTURE**

The Fall session of our 8-week Saturday Sequence will commence Saturday, October 5. Classes run each Saturday, 9:30 am - 12:30 pm on the CMU campus in the College of Fine Arts building. The last class will be Saturday, November 23. Cost is \$195 per student. A discount of \$20 per student is available to families registering for more than one child. Use code MULTIPLE. [Register here!](#) For more information or to apply for a scholarship, please [email us](#).

In concert with the Carnegie Museum of Art's current exhibition, Influencers: The Pritzker Architecture Prize, this fall's series considers the work of great architects and uses their lessons as inspiration for participants' own design explorations.

##### ***Influential Architecture: Form and Color - grades K-2***

Taking its inspiration from great architects like Luis Barragán, this class will explore how designers throughout time have created memorable buildings from the interplay of basic shapes and vibrant colors. Students will build their math skills and learn architectural vocabulary and techniques, including drawing plans and sections and building models.

##### ***Influential Architecture: Material Exploration - grades 3-5***

From paper to steel, learn how material choices affect architecture. Students in this class will consider SANAA's mirrored surfaces, Shigeru Ban's cardboard structures, and Peter Zumthor's work with wood, before exploring the possibilities of various materials for their own designs. Many architectural terms and drawing techniques will be introduced.

##### ***Influential Architecture: Site Sensitivity - grades 6-8***

Looking to the designs of architects such as Rafael Aranda, Carme Pigem and Ramon Vilalta, for their thoughtful integration of history and local culture, and Glenn Murcutt and Balkrishna Doshi, for their careful attention to climate, students will engage with architecture that is very much of its place. They will learn how architects have designed around the world, before also considering the possibilities for architecture in Pittsburgh. Projects will integrate design vocabulary and architectural drawing and model-making.

##### ***Influential Architecture: Social Justice - grades 9-12***

What responsibilities do architects have to their community? How do architects work to address social injustice through their designs? Participants will study refugee shelters by Shigeru Ban and the social housing of Balkrishna Doshi, among other projects, while building their skills in architectural drawing and beginning a design portfolio.

For more information [email us](#) or [visit us](#) online!

### **Martin Luther King, Jr. Day Writing Competition!**

[The Martin Luther King, Jr. Day Writing Awards](#) invites poetry and prose submissions from all high school and college students in western Pennsylvania and all Carnegie Mellon campuses. The deadline for entries to the 2020 competition is Sunday, November 24, 2019. Please help

We seek personal narratives dealing with individual experiences of difference and discrimination or personal reflections on Dr. King's legacy that rely on concrete detail. Selected entries will be published, and students will be invited to read their work at Carnegie Mellon University's annual celebration on Martin Luther King, Jr. Day (Monday, January 20, 2020). Check our website for submission tips, examples of prizewinning work, and resources for educators.

Our [Fall Speaker Series](#) complements the awards by bringing to Carnegie Mellon's campus two authors whose work reflect the values of the Martin Luther King, Jr. Day Writing Awards. This year's series features two distinguished CMU alumni: Shannon Gibney at 4:30 p.m. on Thursday, September 19 (Tepper 2700) and Sarah Valentine at 4:30 p.m. (Center for Student Diversity and Inclusion) on Thursday, October 24. Both programs are free and open to the public. [Questions?](#)

### Inventory of CMU's Community Engagement Activities

Whether teaching computer science in our schools, managing traffic on our roads, or bringing world-class art and music to neighborhoods around Pittsburgh, Carnegie Mellon University's faculty, staff, students, and alumni make enormous contributions to improve our region. Now, in a new effort to share these efforts more broadly, CMU is taking stock of our ongoing activities across campus.

Do you work in the community as part of your role at CMU? Your help in [filling out this simple form](#) will help the university better communicate our successes to partners across the region in the public, non-profit, and corporate communities. Many thanks for your partnership, and for your ongoing commitment to our region. Should you have any questions, please reach out to Rick Siger in the Office of the President at [rsiger@andrew.cmu.edu](mailto:rsiger@andrew.cmu.edu).

## CMU K-12 Educational Outreach Directory

### Career & Professional Development Center

**Carnegie  
Mellon  
University**  
Career &  
Professional  
Development  
Center

The CPDC empowers students and alumni to optimize their professional and life potential through career exploration, experiential learning, and connections with employers and opportunities.

#### Pati Kravetz

Associate Director for Experiential Learning & Student Employment

[Career & Professional Development Center](#)

---

### Computer Science Academy



CMU CS Academy is a project in Carnegie Mellon University's School of Computer Science that has the goal of developing a novel, world-class, online, interactive high school computer science curriculum that is entirely free.

#### **Erin Cawley**

SCS - CMU [CS Academy](#) Program Manager

[ecawley@andrew.cmu.edu](mailto:ecawley@andrew.cmu.edu)

609-289-6927

---

### Entertainment Technology Center



Providing leadership in education and applied research that combines technology and art, to explore learning, storytelling, innovation and entertainment, and to create experiences that educate, engage and inspire.

Imagine working with some of the smartest, most creative people on the planet to produce interactive media that's entertaining and engaging. Carnegie Mellon University's Entertainment Technology Center (ETC) excels at the intersection of technology, art and design. Here creative individuals are challenged to explore, experiment and collaborate to create games, designs and stories using the latest technologies.

#### **John Balash**

Director of Educational Engagement

[jbalash@andrew.cmu.edu](mailto:jbalash@andrew.cmu.edu)

---

### Martin Luther King, Jr. Day Writing Awards

#### **Jim Daniels**

Thomas Stockham Baker University Professor  
of English

Founder/Director, Martin Luther King, Jr. Day  
Writing Awards

#### **Maureen Rolla**

Department of English

Administrative Coordinator

[MLK, Jr. Day Writing Awards](#)

---

## Mellon College of Science

### Mentoring High School Students Towards Summer Session

**William Alba**

MCS - Assistant Dean for Diversity

alba@cmu.edu

---

## Office of the Assistant Vice Provost for Educational Outreach (AVPEO)

### Leonard Gelfand Center

# Carnegie Mellon University

## Leonard Gelfand Center

The Leonard Gelfand Center works with faculty, students and staff through on-campus and community-based activities that improve educational opportunities, especially in the areas of science, technology, engineering and mathematics education for youth. The Leonard Gelfand Center for Service Learning and Outreach was endowed by alumnus Mark Gelfand to create and strengthen partnerships with local schools and education providers.

**Dr. Judith Hallinen, EdD**[AVPEO](#)

Director of the [Leonard Gelfand Center for Service Learning and Outreach](#)

hallinen@cmu.edu

412-268-1498

- Supports faculty Broader Impacts work
- Point of contact for PA Act 48, [K-12 educator PD](#)
- Designs & implements K-12 programs
- Advises [StuCo](#) (Student College)
- Consults with CMU students wishing to pursue careers in K-12 education

**Kristin Lavery, MAT**

Assistant Director of the [Leonard Gelfand Center for Service Learning and Outreach](#)

klavery@andrew.cmu.edu

412-268-6819

- Business Manager & Department Initiator for AVPEO/LGC
- [StuCo](#) Course Administrator
- [K-12 LGC Tutoring Coordinator](#)
- [Gelfand Outreach](#) database developer
- [STEM Career Explorations and 360 Lab Tours](#) project manager
- Graphic & web design for AVPEO/LGC

**Pamela Piskurich, MS**

Program Director of the [Leonard Gelfand Center for Service Learning and Outreach](#)

pjp@andrew.cmu.edu

412-268-1863

- [Gelfand Outreach](#) Program Director for Saturday and Summer programs
- Creates schedule and calendar for Gelfand Outreach programs



- Manages GO Teaching Assistants and office student employees

---

### Office of the Provost - Simon Initiative

Named for the late Nobel and Turing Award laureate and CMU Professor Herbert A. Simon, the Simon Initiative harnesses a cross-disciplinary learning engineering ecosystem that has developed over several decades at Carnegie Mellon. The initiative's goal is to measurably improve student learning outcomes.

#### Maggie Hannan

Associate Director of K-12  
mqhannan@andrew.cmu.edu  
412-841-4033

---

### Pittsburgh Supercomputing Center



Pittsburgh Supercomputing Center is a joint effort of Carnegie Mellon University and the University of Pittsburgh. Established in 1986, PSC provides university, government and industrial researchers with access to several of the most powerful systems for high-performance computing, communications and data storage available to scientists and engineers nationwide for unclassified research. PSC advances the state of the art in high-performance computing, communications and data analytics and offers a flexible environment for solving the largest and most challenging problems in computational science.

#### [BEST - Bioinformatics Education for STudents](#) & [Project GCode](#)

#### Cheryl Begandy

Director, External Relations  
begandy@psc.edu  
412-268-5129

#### Vivian Benton

Communications/Publications Project Manager  
benton@psc.edu

#### Cheryl Begandy

Director, External Relations  
begandy@psc.edu  
412-268-5129

#### Vivian Benton

Communications/Publications Project Manager  
benton@psc.edu



## Center for Architecture Explorations

The [Center for Architecture Explorations \(CAE\)](#) develops programs that serve unique Kindergarten-professional architectural education paths. The CAE builds on our School's experience with youth education, university service learning projects, engagement with the architectural practice, and academic research to explore ways we can support architectural education pedagogy and foster equity and diversity in building industry professions.

### **Jenna Kappelt**

Manager of Outreach Programs

[jkappelt@andrew.cmu.edu](mailto:jkappelt@andrew.cmu.edu)

---

### **School of Computer Science**

### **Johnathan Reynolds**

SCS - Outreach Project Manager

[jreynold@cs.cmu.edu](mailto:jreynold@cs.cmu.edu)

412-268-8201

---

### ***Thank you to our contributors!***

This newsletter is a collaborative project across CMU schools, colleges, departments, offices, and programs with information compiled and shared by the Office of the Assistant Vice Provost for Educational Outreach and the Leonard Gelfand Center with the CMU campus community. We hope to expand our reach with each issue as this project grows and continually improves for our audience. If you have questions or comments about the individual articles, please reach out to the program contact directly. If you would like to add an additional CMU K-12 Educational Outreach directory listing or news item for subsequent issues of this newsletter, please contact [Kristin Lavery](#).



---

Copyright © 2019 Carnegie Mellon University, All rights reserved.

[Want to change how you receive these emails?](#)

You can [update your preferences](#) or [unsubscribe from this list](#).



