PACC
PAUL ALLEN COMPUTING CHALLENGE

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DATA SCIENCE IN ACTION!

OVERVIEW

The Paul Allen Computer Challenge is an annual event that brings together aspiring computer scientists in high school to answer questions about real world scenarios. This year the challenge will involve analyzing data from UW Husky sports teams to draw conclusions about athletic performance.

This competition is split into two parts:

Part I: Students are provided a dataset and a list of tasks to complete in order to analyze and visualize the data provided.

Part II: Students will be provided with a more robust dataset, form their own hypotheses about it, and develop a research plan to analyze the data using techniques from Part I. Results will be summarized and presented at a poster session.

Student teams will be mentored in the challenge by UW graduate students to help guide their investigations.

CALENDAR

DECEMBER 19, 2014

Part I dataset and challenge released. See pscsta.org/pacc

MARCH 27, 2015

Submission deadline for Part I

APRIL 10, 2015

Part II dataset released to qualifying teams

JUNE 6, 2015

Poster session and awards ceremony at Living Computer Museum

PRIZES

Student teams who complete Part II and present their posters at the Living Computer Museum on June 6, 2015 will receive an activity tracker and a PACC sweatshirt for each team member.

pscsta.org/pacc

pscsta   LIVING COMPUTER MUSEUM   HCDE Human Centered Design & Engineering University of Washington   cse   W

FORMAT

Data scientists are encouraged to form teams of up to 3 students in order to tackle this challenge. Teams must be made up of current Washington State students. All students who participate in the challenge should be identified by name on their submitted materials.

Part I

- If students are unable to complete all of the tasks they should still submit their work and will receive partial points.

- Any team that submits a Part I entry will be registered and qualified for Part II (even if their answers are incomplete).

Part II

- This will be an independent project, students will not be given a set of concrete tasks but they will be provided with a more robust dataset.

- Students will receive mentor support from current University of Washington graduate students from various departments including CSE, HCDE, and Informatics. These mentors will help students frame their hypothesis and complete the brainstorming and analysis process.

- Students will create a poster to be exhibited in a poster session at Living Computer Museum in late Spring of 2015.

SOFTWARE

Students can use any and all available software to analyze the datasets in Parts I and II. No preference will be given to students who use more complex software. Most of the questions in Part I can be answered using Microsoft Excel or a similar spreadsheet program. Writing computer programs to assess the data may be helpful, but is not an essential component of Part I of the competition.

ASSISTANCE

If students need guidance on how to start please refer them to the resource document provided. Advisors may also contact Justin Spielmann, LCM Education Coordinator, at JustinS@livingcomputermuseum.org with any questions or for general assistance.

ACADEMIC HONESTY

Plagiarism of answers or programming code will not be tolerated. If a participating advisor, mentor, or any PACC representative finds evidence of plagiarism or any type of academic dishonesty the team will be eliminated from the competition.

The Paul Allen Computer Challenge is a collaboration between the Puget Sound Computer Science Teachers Association (PSCSTA), the Living Computer Museum, the University of Washington Human Centered Design and Engineering (HCDE) department, the University of Washington Computer Science & Engineering (CSE) department, and University of Washington Intercollegiate Athletics (ICA).