

Richard Zhao

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EDUCATION	Carnegie Mellon University , <i>BS in Mathematics, Minor in Computer Science</i> May 2020 Pittsburgh, PA GPA: 3.2/4.00
EXPERIENCE	Digital Media Academy , <i>Instructor/Course Developer</i> May 2017 — Present Cambridge, MA <ul style="list-style-type: none">• Lead instructor for iOS development, Game Programming, and Advanced Java• Develop and revamp course curriculum for advanced Java course Southern California Academy of Sciences , <i>Researcher</i> May 2014 — April 2016 Long Beach, CA <ul style="list-style-type: none">• Helped research effects of fertilizer runoff on various species of cyanobacteria• Cultivated multiple generations of cyanobacteria for testing purposes Southern California Marine Institute , <i>Researcher</i> May 2014 — April 2016 Terminal Island, CA <ul style="list-style-type: none">• Modeled coastal environments to perform experiments regarding effects of fertilizer runoff• Created real life model of typical coastal sewer dump• Worked with marine biologists to investigate short term growth effects of fertilizer and nitrogen pollution on certain species of cyanobacteria.
LEADERSHIP	WHS Vex Robotics , <i>Head Programmer</i> September 2013 — June 2016 Cerritos, CA <ul style="list-style-type: none">• Led team of programmers and taught them RobotC from scratch• Coordinated lectures to teach local elementary schools and middle schools about robotics.
PROJECTS	EnGee , <i>Bootstrap, Flask, Pandas, Sklearn, Node.js</i> Sandbox for the machine learning pipeline, enabling students to learn about machine learning and professionals to use different models to analyze data sets without technical knowledge. https://github.com/richardzhao2/engee Schedulize , <i>Python, PyGame, Pandas, Sklearn</i> An app that uses a student's past performance in classes and machine learning to recommend future courses. Won HackCMU's best design award https://devpost.com/software/schedulize EPM Dashboard , <i>Flask, NumPy, Pandas, Jupyter, Sklearn, Node.js, d3.js, SASS, React.js</i> Web app that displays a revamped basketball box score and introduces a new statistic that uses live player tracking via SportVU data and machine learning to measure basketball IQ. https://github.com/richardzhao2/EPM-Dashboard
SKILLS	Languages/Technical: Python, Java, C, C#, Javascript, HTML/CSS, MATLAB, Git, Unix Libraries: Pygame, NumPy, Pandas
Relevant Coursework	<i>Concepts of Mathematics / Data Structures and Algorithms / Matrix Algebra / Mathematical Software / Fundamentals of Programming and Computer Science / Discrete Mathematics / Statistical Methods and Data Science / Multivariate Analysis / Software Construction</i>
Awards	Best Design at HackCMU , <i>Pittsburgh, PA</i> September 2017 Created schedule recommender application for students