# Greg Bunyea

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## EDUCATION

### Carnegie Mellon University, School of Computer Science

Masters of Education Technology & Applied Learning Science (**METALS**)
Aug 2019, GPA: 3.76/4.33

### University at Buffalo

B.A. Computer Science
May 2018, *Cum Laude*

## SKILLS

### Learning Science

Cognitive Task Analysis (CTA), E-Learning, Backward Curriculum Design, KLI

### Design

Contextual Inquiry, Interviews, Affinity Diagramming, Storyboarding, Prototyping, Usability Testing

## TOOLS

### Programming

JavaScript, Python, React.js, p5.js, Git

### Instruction Design

OLI, CTAT (Intelligent Tutors)

### Visual Design

Figma, Adobe XD, InDesign, Illustrator, Animate, Inkscape, GIMP

## COURSEWORK

Learning Media Design
Learner Experience Design
Personalized Online Learning I & II
E-Learning Design
Tools for Online Learning
Design for Educational Games
Ed. Goals, Instruction, and Assessment

## HONORS/AWARDS

METALS Merit Scholarship 2018-2019

University at Buffalo Provost Scholarship 2014-2018

Pledge of the Computing Professional 2018

## PROJECTS │ Carnegie Mellon University, Pittsburgh PA

### Capstone Project
*Client: Renaissance Learning, Inc. (RL)*                     Jan 2019 - Aug 2019

- Collaborated with RL teams to develop new district admin dashboard
- Supported team of 5 to create product to meet needs of users & RL
- Coordinated 37 stakeholders for research and user-testing sessions

### Impostor Syndrome Educational Game                     Mar 2019 - Jun 2019

- Designed multiplayer card game with event-driven gameplay
- Conducted 4 structured interviews for authentic event design
- Tested 7 times to analyze game mechanics for alignment

### Debugging Tutor                                         Apr 2019 - May 2019

- Conducted 6 CTAs with novice, mid-ability, and expert programmers
- Developed sequence model based on CTAs, reviewed model with expert
- Designed intelligent tutor to scaffold steps of debugging process

### Phonics Tutor
*In Collaboration with: The CMU Children's School*          Nov 2018 - Dec 2018

- Conducted CTA observation with class of kindergarteners
- Designed cognitive model and student interface for intelligent tutor
- Ran 3 testing trials, resulting in revised cognitive model

### Career Oriented ESL Curriculum
*In Collaboration with: Journey's End Refugee Services*     Oct 2018 - Dec 2018

- Interviewed stakeholder to contextualize learners and environment
- Established a set of educational goals based on the population needs
- Developed one week of backward designed assessments & instruction

### Interview Preparation E-Learning Module                 Aug 2018 - Oct 2018

- Synthesized learning goals via theoretical CTA and structured interview
- Developed instructional content to improve on existing course materials
- Analyzed pre/post assessment data, found 10% learning gain

## RELEVANT EXPERIENCE

### Head Teaching Assistant & Senior Research Aide
*University at Buffalo, Buffalo NY*                         May 2016 - May 2018

- Designed initial content & activities for *How the Internet Works* course
- Created video content for flipped-style delivery on internet-class.org
- Oversaw approximately 40 TAs and Faculty on weekly basis
- Revised curriculum using data from Fall 2016 to improve Fall 2017 course
- Scaled course from 440 to 660 students by shifting to seminar-style