

Ryan Emberling

Work Experience

Freudigman & Billings

Westport, CT

Educational Therapist Aug 2017- Aug 2018 and Aug 2013- Aug 2015

- Tutored 25 hour-long 1-on-1 sessions per week in math, physics, computer science, and test-prep
- Profiled students' learning with diagnostic questioning and varied instruction to tailor teaching to student needs
- Remediated students' memory systems and depth of processing with personalized learning regimens
- Designed and ran week-long introductory programming course in Python
- Aggregated and analyzed test data from over 200 Excel files using VBA script to crawl server's directory structure

Leader Biomedical

Amsterdam, NL

Business Relations Officer

Sep 2015 – July 2017

- Managed a team 10-person product development team in the design and development of NovoMem membrane from the specification of user needs through initial testing
- Developed operational workflows and created corresponding Quality Management System (QMS) documentation for over 10 processes across every department, resulting in company's achievement of ISO 13485 certification
- Developed and ran over 10 QMS workshops to train employees
- Automated generation and tracking of over 100 QMS records with multi-file Excel system using VBA

Projects

Dimensional Analysis Tutor

Fall 2018

Developed Intelligent Tutoring System that adaptively reformats UI with scaffolding that breaks steps into sub-steps for struggling students (Built with Cognitive Tutor Authoring Tools aka CTAT)

Fraction Comparison Tutor

Fall 2018

Cognitive Tutoring System maintains a long-term individualized model of students' knowledge to appropriately interleave worked examples and self-explanation with decision making practice (Built with CTAT)

E-Learning Module for Plastic Surgeons

Fall 2018

Developed and deployed hour-long educational module used at University of Pittsburgh Medical Center to teach core concepts of vascular surgery to 20 plastic surgery residents (built on Open Learning Initiative platform)

(203)-803-6446

ryan.emberling@gmail.com

<https://emberling.education>

Education

Carnegie Mellon University

Pittsburgh PA August 2019

Masters in Educational Technology and Learning Science: School of Computer Science – GPA 4.1

Trinity College

Hartford, CT May 2013

Bachelor of Science in Mathematics and Philosophy

Summa Cum Laude – GPA 3.9

Skills

Learning Science

Curricular Design, Cognitive Task Analysis, Learning Curve Analysis

Web Development

HTML, CSS, Javascript, node.js, sails.js, angular, angularJS, JQuery

Data Science

Python with numpy, pandas, sklearn, and jupyter notebooks; Excel with pivot tables and VBA