

NOAH JACOB ZWEBEN

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EDUCATION

Columbia University School of Engineering and Applied Science

New York, NY

B.S. Computer Science

Expected May 2017

– Academics: GPA: 4.19/4.00

– Honors: Valedictorian Class of 2017, Tau Beta Pi

WORK EXPERIENCE

User Interfaces Lab, Research Assistant

Columbia University, Sept. 2016 - Present

- Create augmented reality interfaces for a digital manuscript of medieval artistic and scientific processes
- Design 3D models to illustrate the descriptions in the manuscripts to facilitate the study of the texts

Facebook, Software Engineering Intern

Menlo Park, CA, May 2016 – August 2016

- Developed spam fighting and malicious content infrastructure in Haskell
- Enabled automatic documentation and cross-linking of code involved in abuse detection

Emerging Scholars Program, Instructor

Columbia University, Feb. 2016 - May 2016

- Taught one-credit survey of advanced topics in computer science to first years interested in pursuing studies in the field, specifically aimed at underrepresented groups in technology
- Generated course content to engage students with exciting developments in technology

Vibrant Composites, Intern

Cambridge, MA, June 2015 – Aug. 2015

- Researched and developed embedded components for use in a haptic feedback device
- Prototyped various devices using the start-up's μ MECS fabrication technology
- Designed and fabricated in-house manufacturing equipment for small-scale production

Robotics and Rehabilitation Lab, Intern

Columbia University, June 2014 – Aug. 2014

- Installed two servo-drives responsible for the control of the Active Leg Exoskeleton, a gait training robot for stroke victims
- Wired Emergency-Stop circuit. Machined parts for control box. Soldered connector cables

PROJECTS

DanceMuse

- Application which dynamically writes computer-generated music based on dancer's movements captured through phone's accelerometer

MusicWebs

- Designed and coded a web app to create collaborative multi-track songs. Users can record new solos and record harmonies/instrumentation to layer onto others' tracks.

ACTIVITIES

Notes and Keys A Cappella, Music Director and Webmaster

Jan. 2014 – Present

Application Development Initiative Labs

Fall 2015

- Participant in an intensive semester-long web-application creation workshop

Columbia Outdoor Orientation Leader, Canoeing Leader

May 2014 – Present

Engineers Without Borders Water Infrastructure Design Lead

Sept. 2013 –2015

- Led team in cost analysis and design of water supply for developing community in Morocco.

PROGRAMS & SKILLS

Web Design, Graphic Design, Photoshop, Unity, C, C++, Python, Java, HTML, CSS, JavaScript, Flask, Matlab, OpenCV, SolidWorks, Soldering, 3D Printing, Robotics, Laser Cutting