Melanie Hsu – Mobile & App Developer

(914) 409 8090 – mlh2197@columbia.edu – linkedin.com/in/hsumelanie – bluemelodia.github.com

EDUCATION

Columbia University – New York, NY – (2013 to 2016)
- ★ M.S. in Computer Science – Software Systems Track, 4.00
- ★ Post-Baccalaureate in Computer Science, 3.94

Johns Hopkins University – Baltimore, MD – (2009 to 2013)
- ★ B.A. in Behavioral Biology, 3.91

EXPERIENCE

Software Engineering Intern at BioDigital – New York, NY – Jun '15 to Present
- ★ One of the two leading developers for an iOS app utilizing the BioDigital 3D engine for Novartis.
- ★ Won second place at the company's Hackathon by implementing a human body slider that allows users to toggle the visibility of specific body systems and all deeper structures.
- ★ Built an interactive, collapsible tree view for the BioDigital Human iOS app (ver. 2.1) that enables users to visualize, highlight, and toggle the visibility of body systems and parts in the 3D scene.
- ★ Coded a cached search menu for the 2.1 version of the BioDigital Human iOS app that retrieves, organizes, and displays downloadable modules matching the user's search query.

Application Development Initiative (ADI) Labs Member – New York, NY – Oct '14 to Present
- ★ Designed and upgraded a mobile-friendly version of Eventum's user signup interface.

iOS Game Developer at MakeSchool – New York, NY – Jun '14 to Aug '14
- ★ Learned Objective C, SpriteBuilder, and XCode by experiencing the game development cycle.
- ★ Developed, designed, illustrated, and published an iOS game, Sleepy Head.

PROJECTS

Novartis Oncology – A white-label app that features a variety of oncology conditions and provides users with a detailed exploration of Novartis's pharmaceutical products and resources.

BioDigital Human – Anatomy and Health Conditions in 3D! – BioDigital's flagship iOS app. I added a recursive anatomy tree feature and upgraded the module search function.

Anatomy Explorer – BioDigital – A single-module anatomy iOS app featuring a full-body 3D human model. I ported most toolbar functionalities and the features I implemented for Human 2.1.

Sleepy Head: Survive to Sunrise – A fast-paced iOS game where players flick away falling objects before they hit a loud snorer. Includes eight levels and a variety of obstacle types.

PhotoDex – An open-source computer vision Python app that manipulates photo directories. Features include deleting visually similar photos and querying a directory for color matches.

Eventum – An open-source event-driven content management web app made by Dan Schlosser and worked on by members of ADI Labs, a mentoring program run by Columbia's largest CS club.

ByeByeBuy – A shopping impulse-control iOS app my team created at MHacks V. Coded the push notifications feature and enabled users to take, save, and display photos of their wish list items.

SKILLS

Objective C, iOS Development, Java, C, Python, HTML/CSS, Bug Testing, User Interface Design, Photoshop, Digital Art, Jewelry Crafting