# JUSTINE LO

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**EDUCATION** Boston University College of Engineering, Class of 2014 – Boston, MA

Bachelor of Science in Biomedical Engineering/Minor in Biology

**SKILLS** MATLAB, HTML, CSS, JavaScript, SAS, SPSS, C++, SolidWorks, 3D-Printing, Microsoft Office

# **WORK & RESEARCH EXPERIENCE**

#### Front-End Developer and Designer – Boston, MA

2015 - Present

- Develop and design websites to express brands and digital experiences
- · Translate designs into full websites using HTML, CSS, JavaScript, Adobe Photoshop
- PORTFOLIO: <a href="https://justlo.github.io/JustineLo/">https://justlo.github.io/JustineLo/</a>

# Biomedical Engineer & Research Associate | Hebrew SeniorLife - Roslindale, MA

May 2014 - Present

- · Researcher at Institute for Aging Research in Mobility and Falls Translational Research
- Independently plan and execute research projects involving gait, balance, signal processing, EMG, multi-scale entropy, wearable sensors, mobile applications
- Interpret and analyze data using MATLAB and SAS to communicate data into actionable recommendations for doctors and researchers
- CURRENT PROJECTS: writing manuscript on analysis of muscle co-contraction; analysis of health and fitness interventions using wearable sensors; testing and assisting in developing mobile application to assess balance and gait

#### Senior Design Project | Boston University Roblyer Laboratory – Boston, MA

Sept. 2013 – May 2014

#### 3D-Printing Tumor and Vascular Phantoms for Optical Imaging and Spectroscopy

- · Engineered and 3D-printed customizable material to create tissue-simulating optical phantoms
- Designed and 3D-printed optical phantoms mimicking vasculature and tumor inclusions to advance the use of optical imaging and spectroscopy systems in clinical predictions and cancer treatments

#### Hematology Oncology Student Researcher | Boston Univ. School of Medicine - Boston, MA Jan. 2014 - May 2014

- · Studied effects of obesity on the immune system by analyzing lymphocyte profile in mice adipose tissues
- Assisted experiments using pH-sensitive nano-beads to confirm B1-B cells perform phagocytosis
- · Cell counting with Flow Cytometer; tissue cell culture; mice dissection

# Pulmonary Division Research Trainee | Brigham and Women's Hospital - Boston, MA

Summer 2013

- Successfully developed software algorithms using MATLAB to enable the identification and quantification of clinically relevant biomarkers in CT scans of multiple COPD cohorts
- Directly supported team of 5 in exploratory clinical research for the association of CT phenotypes with clinical symptoms and outcomes

## Phys. Med. & Rehab. Services Intern | U.S. Dept. of VA Healthcare – West Roxbury, MA

2011 – 2012

- Streamlined patient care and proficiency by evaluating patient and department data; delivered and executed action plan to management which improved staff communication, resource allocation, and quality of care
- · Developed and implemented pre/post-surgical best practices by analyzing production costs and patient statistical data

#### **PUBLICATIONS**

Phuong Diep, Sanjana Pannem, Jordan Sweer, **Justine Lo**, Michael Snyder, Gabriella Stueber, Yanyu Zhao, Syeda Tabassum, Raeef Istfan, Junjie Wu, Shyamsunder Erramilli, and Darren Roblyer, "*Three-dimensional printed optical phantoms with customized absorption and scattering properties*," Biomed. Opt. Express 6, 4212-4220 (2015).

#### **INTERESTS**

- · fluent in Cantonese, studying Mandarin
- photography, sketching, piano, guitar, 3D-printing, Chinese folk dance