

EDUCATION

- Ph.D.** — Molecular Bioscience and Bioengineering, University of Hawaii at Manoa, Honolulu, Hawaii, USA, **present**
Advisor: Prof. John Shepherd
- M.S.** — Compute Science, University of Hawaii at Manoa, Honolulu, Hawaii, USA, **2018**
Thesis: *A Heuristic for Optimizing the Physical Layout and Network Topology of Integrated 3D Multi-chip Systems Under Temperature Constraints*
Advisor: Prof. Henri Casanova
- B.S.** — Biology, University of Oregon, Eugene, Oregon, USA, **2014**
Minor: Chemistry

EXPERIENCE

- 11/18 - present:** Graduate Researcher, Shepherd Research Lab, University of Hawaii Cancer Center, Honolulu, Hawaii
- 06/20 - 08/20:** NASA intern, Johnson Space Center, Houston, Texas
- 8/15 - 11/18:** Researcher, Eyegenix LLC, Honolulu, Hawaii
- 6/17 - 8/17:** Database Engineer, Social Science Research Institute, University of Hawaii at Manoa, Honolulu, Hawaii
- 6/12 - 9/12:** Pathology Student Trainee, Queen's Medical Center, Honolulu, Hawaii
- 6/11 - 9/11:** Pathology Student Trainee, Queen's Medical Center, Honolulu, Hawaii

PUBLICATIONS

Peer Reviewed Journal

2. **L. Leong**, S. Malkov, K. Drukker, B. Niell, P. Sadowski, T. Wolfgruber, H. Greenwood, B. Joe, K. Kerlikowske, M. Giger, J. Shepherd, *Dual-energy three compartment breast imaging for compositional biomarkers to improve detection of malignant lesions*, Nature Communications in Medicine, (Accepted 2021)
1. X. Zhu, T. Wolfgruber, **L. Leong**, M. Jensen, C. Scott, S. Winham, P. Sadowski, C. Vachon, K. Kerlikowske, J. Shepherd, *Deep learning predicts interval and screen-detected cancer from screening mammograms: a case-case-control study in 6369 women*, Radiology, (Accepted 2021)

Refereed Conference Publications

3. **L. Leong**, M. Giger, K. Drukker, K. Kerlikowske, B. Joe, H. Greenwood, S. Markove, B. Niell, J. Shepherd, *Three compartment breast machine learning model for improving computer-aided detection*, in Proc. of the International Workshop on Breast Imaging, Leuven, Belgium, 2020.
2. **L. Leong**, S. Wiere, *Digit Recognition from Wrist Movements and Security Concerns with Smart Wrist Wearable Devices*, in Proc. of the Hawaii International Conference on Science Systems (HICSS), Maui, Hawaii, 2020.
1. M. Koibuchi, **L. Leong**, T. Totoki, H. Matsutani, H. Amana, H. Casanova, *Sparse 3-D NoCs with Inductive Coupling*, in Proc. of the Design Automation Conference (DAC), Las Vegas, Nevada, 2019.

Conference Abstracts

3. M. Wong, EY. Liu, D. Lowe, J. Bennett, **L. Leong**, E. Weiss, S. Heymsfield, J. Shepherd, *Detecting Significant Body Composition Change With Reposed Three-Dimensional Optical Surface Scans*, Obesity Week 2020, 2020.
2. **L. Leong**, T. Wolfgruber, S. Spencer, S. Muller, J. Shepherd, *Accurate Local Estimation of Compressed Breast Thickness in Digital Breast Tomosynthesis Using an Iterative Reconstruction Approach*, Radiological Society of North America (RSNA), Chicago, Illinois, 2019.
1. J. Acoba, C. Lum, **L. Leong**, *Analysis of KRAS and BRAF Mutant Colorectal Cancers in a Multiracial Population.*, American Society of Clinical Oncology (ASCO), 2012.

Other Publications

3. **L. Leong**, *Area Under the Curve and Beyond*, Medium, <https://lambertleong.medium.com/area-under-the-curve-and-beyond-f87a8ec6937b>, 2021
2. **L. Leong**, *Correspondence: Preoperative assessment of breast cancer: Multireader comparison of contrast-enhanced MRI versus the combination of unenhanced MRI and digital breast tomosynthesis*, Breast, 2020 Jun;51:102. doi: 10.1016/j.breast.2020.03.007. Epub 2020 Mar 31. PMID: 32259673; PMCID: PMC7375661.
1. **L. Leong**, *Snapshot Samplings of the Bitcoin Transaction Network and Analysis of Cryptocurrency Growth*, <https://arxiv.org/abs/2003.06068>, 2020.

HONORS and AWARDS

- Graduate Student Organization Grants & Awards, University of Hawaii, 2020.
- Trainee Travel Grant, University of Hawaii Cancer Center, 2020.
- Trainee Travel Grant, University of Hawaii Cancer Center, 2019.

VOLUNTEER

- Event Volunteer, Queen's Medical Center, Honolulu, HI
- AREo program coordinator, Honolulu, HI , <http://aerohawaii.org/>
- Substitutue Instructor, Computational Thinkers, Honolulu, HI, <https://www.computationalthinkers.org/>
- Volunteer, Pathology Department, Queen's Medical Center, Honolulu, HI