Lambert Leong

https://www.lambertleong.com

Email : lamberttleong@gmail.com
Mobile : +1-541-583-0787

Education

University of Hawaii — Honolulu, Hawaii
Ph.D in Bioengineering; GPA: 3.9 — *Jan. 2019 – Current*

University of Hawaii — Honolulu, Hawaii
Master of Science in Computer Science; GPA: 3.85 — *Aug. 2016 – Dec. 2018*

University of Oregon — Eugene, Oregon
Bachelor of Science; GPA: 3.2 — *Sept. 2010 – June. 2014*

Experience

Pathway Intern — **NASA** — *Jun 2020 - AUG 2020*

Anthropometry and Biomechanics Facility: Tools (Python, Matlab)

- Dual energy X-ray and 3D scan fuusion imaging
- DXA body composition predictions from 3D body scans

Graduate Researcher — **University of Hawaii Cancer Center** — *Nov 2018 - Present*

Artificial intelligence and composition imaging analysis: Tools (Python, Matlab)

- Dual energy X-ray imaging for cancer detection and classification
- Machine learning model development to categorize lesion type form compositional features
- Neural network development for early breast cancer risk detection

3D body shape and composition modeling: Tools (Python, C++, Matlab, MeshLab,R)

- Contributed to software that analyzes a patients 3D optical scans
- Developed algorithms to automatically calculate anthropometry

Researcher — **Eyegenix LLC** — *Aug 2015 - Nov 2018*

Bio-Engineered Cornea (BEC): Class II medical device bio-polymer for human transplant

- Refined cell and tissue assays to better predict in-vivo bio-compatibility of developed bio-polymers
- Data analysis to optimize manufacturing and development of the bio-engineered cornea

Graduate Researcher — **Social Science Research Institute** — *Jun 2017 - Aug 2017*

Hawaii, Level of Service Inventory-Revised (LSI-R): Tools (SQL, R)

- Aggregated data and joined tables to construct Hawaii's, Department of Public Safety's, LSI-R database

Publications

- *Three compartment breast machine learning model for improving computer-aided detection*, L. Leong, M. Giger, K. Drukker, K. Kerlikowske, B. Joe, H. Greenwood, S. Markov, B. Niell, J. Shepherd, in proc. of 15th International Workshop on Breast Imaging (IWBI2020), Leuven, Belgium, May 2020.
- *Digit recognition from wrist movements and security concerns with smart wrist wearable devices*, l. leong, s. wiere, in proc. of the hawaii international conference on science systems (hicss), maui, hawaii, january 2020.
- *Sparse 3-D NoCs with Inductive Coupling*, M. Koibuchi, L. Leong, T. Totoki, H. Matsutani, H. Amana, H. Casanova, in Proc. of the Design Automation Conference (DAC), Las Vegas, Nevada, June 2019.

Projects

- **Genetic Approach to Network Topology Optimization of Integrated 3D Multi-chip Systems**: Implemented a genetic algorithm to explore optimum layout geometries for systems containing many microprocessor chips (Python, C).
- **Parallel Steganographic Encryption**: Developed a program to encrypt data and hide it in images in parallel to achieve 4 times the speed up and an added layer of security (Python, C++, OpenCV).