# Liang Bo Wang

### Experience

CURRENT, FROM JUL 2014

# Internship at Microsoft Research Asia, Beijing Cancer Image and Pathway Analysis

Identified potential colorectal cancer subtype reported by pathologist. Extracted histopathology image features using CNN trained by ImageNet, a large general image database. Conducted pathway and prognosis analysis based on image clustering. Became familiar with machine learning algorithms and image analysis.

Current, from Jul 2012

# Project Research at BIOINFO. AND BIOSTAT. CORE LAB, NTU CENTER OF GENOMIC MEDICINE NGS Tool Development and Cancer Research

Developed tools for online NGS data processing and visualization. Designed the cloud service in collaboration with company and governmental institution. Built background of genetic cancer research and survival analysis using both microarray and sequencing data.

Feb 2012 – Nov 2012

Project Research at Micro & Nano Analytical Tech. and System Lab, NTU

CMOS-based Tactile Sensor System

Designed the amplification circuit for signal measurement and related program. Became familiar with CMOS fabrication and IC layout design.

#### **Publications**

JOURNAL Large Scale Tissue Histopathology Image Classification and Segmentation via Deep Convolutional Activation Features

IEEE Trans. Med. Imag. (submitted) JAN 2015

Poster Nextbiopy: utilities for next-generation sequencing data processing (1<sup>st</sup> author)

APCMBE in Tainan, Taiwan Oct 2014

POSTER Identification of novel miRNAs in breast data of the next generation sequencing using miRDeep2 and Galaxy (2<sup>nd</sup> author)

AACR in Washington, USA APR 2013

Review Common applications of next-generation sequencing

technologies in genomic research (co-1st author)

Transl Cancer Res FEB 2013

Oral CMOS MEMS metal-based tactile sensors development

(presenter)

AVS in Tampa, USA Oct 2012

http://liang2.tw r02945054@ntu.edu.tw

+886-953-632-348

### EDUCATION

Jan 2014 – Present Master of Science

Expected Jun 2015

BIOMEDICAL ELECTRONICS AND

BIOINFORMATICS

National Taiwan University

SEP 2009 – JAN 2014 Bachelor of Science

ELECTRICAL ENGINEERING ECONOMICS (minor) National Taiwan University

#### **AWARDS**

2012 Outstanding Research Award

NTU Center of Genomic Medicine Summer Research

2012 Gold medal and World Jamboree advance

NTU-Taida Team, iGEM (International Genetically Engineered Machine)

#### Programming Skills

Languages Python, R, Javascript(Coffeescript), HTML/CSS, ŁTFX, Scala, C, SQL

Proficient Tools Numpy, Pandas, RPy2, Matplotlib,

IPython, ggplot2

Familiar OSes Debian Linux, Mac OSX

## ACTIVITIES

2014, 2015 PyCon APAC Organizer

Public Relation and Web Editor

2013 – Present Taiwan R User Group

Co-organizer and Speaker

2013 – 2014 Taiwan and China R Conference

Speaker

2009 – 2013 NTU Photo Club

President and Leader of Education

2011, 2012 NTUEE Summer Camp for High School

Staff and Leader of Photography