# MARIAM DOLIASHVILI

# mariamd@hawaii.edu Curriculum Vitae

#### **EDUCATION**

University of Hawaii, Manoa

August 2015 - present

Ph.D. in Computer Science . GPA: 3.7 / 4.0

University of Hawaii, Manoa

December 2017

M.S. in Computer Science focusing on Machine Learning . GPA: 3.7 / 4.0

Ivane Javakhishvili Tbilisi State University

July 2015

B.S. in Computer Science . GPA: 3.9 / 4.0

#### WORK EXPERIENCE

**Facebook** 

September - December 2018

Menlo Park, CA, USA

Research Engineering Intern (ML)
Scoring search query interpretations

· Team: Facebook Search

DeepMind

April - August 2018

Mountain View, CA, USA

· Worked on Population Based Training for Neural Networks.

Google

May - August 2017

Software Engineering Intern

Research Engineering Intern

Mountain View, CA, USA

· Predicting probabilities for a multi-class problem using various machine learning models with C++ / Tensorflow / Python.

· Team: Knowledge Graph

Google

June - September 2016

Software Engineering Intern

Zurich, Switzerland

- · Trained an LSTM neural network on a query stream, using Tensorflow / Python.
- · Team: Geo Growth and Analytics

#### JSC. Georgian Card

March - July 2012

Software Developer

Tbilisi, Georgia

· Developing software for e-banking and ATMs using Java, PL/SQL.

#### TEACHING EXPERIENCE

### University of Hawaii

August 2015 - July 2018

Honolulu, HI, USA

Graduate Assistant

· ICS 311: Algorithms

· ICS 211: Data Structures

· ICS 321: Data Storage & Retrieval

· ICS 241: Discrete Mathematics

· ICS 423: Data Security and Cryptography

- · ICS 415: Intro to Programming for the Web
- · ICS 222: Concepts of Computer Science

#### ACCOMPLISHMENTS AND AWARDS

Twitter Fellowship	2019
Winner of the Geostat and "UN Women" Data Visualization Hackathon	2019
Speaker at United Nations Assembly (Tbilisi, Georgia)	2019
Top 150 finish on Google Code Jam with invitation to Google I/O	2018, 2019
Google Women Techmakers funding for TensorFlow Developer Conference	2018
Facebook invitation and funding for Women in Research Lean In	2018
Google scholarship for Grace Hopper Celebration	2016
Honorable mention at ACM ICPC Pacific Northwest Regional Contest	2015
Georgian presidential scholarship for high ranked students	2011, 2012, 2013, 2014
Top 10 finish at HackTbilisi International Hackathon	2014
Honorable mention at ACM ICPC Northeastern European Regional Contest	2012, 2013, 2014
III Diploma at Southern Caucasus Programming Championship	2012, 2013
Finalist of Geolymp Programming Competition	2013
Speaker on The Georgian - German School and Workshop in Basic Sciences	2012
Third place at Tbilisi State University Calculus Competition	2011
Full bachelor's degree scholarship from georgian government	
for top 5% of students based on the National Examination Center results	2010

#### RESEARCH AND PROJECTS

### Predicting Emoji Usage from Twitter Dataset for Emoji Recommender System

September 2017

Master's thesis . Supervisors: Lipyeow Lim, David Chin

- · Analysing and classifying emojis and related emotions from a Twitter dataset. Building a recommender system with sentiment analysis and next-word prediction methods.
- · Using Python, NLTK, Scikit, Keras, Tensorflow.

# Implementation and Analysis of Parallel Algorithms (Merge Sort, Matrix Multiplication) in Various Environments

July 2015

- Bechelor's thesis . Supervisor: Koba Gelashvili . Co-author: Sopio Chikvinidze
- · Analysis of the parallel algorithms using different technologies
- · Using C++ threads, pthreads, the "future" library, OpenMP, MPI.

#### **Cubed Sphere Simulator**

5<sup>th</sup> Georgian - German School and Workshop in Basic Science

August 2012

· Implementation of the cubed sphere simulator using Euler's explicit and implicit schemes, locally one-directional decomposition, classical Runge-Kutta method and fourth-order strong stability preserving schemes.

#### PROGRAMMING SKILLS

Languages and Libraries: C/C++, Python, Java, TensorFlow, PyTorch, Keras

MPI, OpenMP, QT, OpenGL.

Databases and Mobile Technologies: Oracle, PL/SQL, JDBC, SQLite, Android.

#### **VOLUNTEER WORK**

Organizing Committee, Google Women Techmakers Meetup in Georgia

Summer 2019

Coaching teams for ACM ICPC pacific northwest regional contest

2015 - 2019

Founder and Mentor at Lean In - UH Tech

Spring 2018

Tbilisi State University Envoy

 $Student\ representative$ 

 $2012 - 2014 \\ Tbilisi, \ Georgia$ 

## LANGUAGES

Georgian - Native . English - Fluent . Korean - 초급