

SOFTWARE ENGINEER · MATHEMATICIAN · EDUCATOR

☐ (+1) 318-364-6730 | Marian aleskova@berkeley.edu | Marian aleskova.me | ☐ qithub.com/aleskova

| in linkedin.com/in/aleskova

# **Education**

#### **University of California - Berkeley**

B.A. COMPUTER SCIENCE, B.A. MATHEMATICS

BERKELEY CERTIFICATE IN ENTREPRENEURSHIP AND TECHNOLOGY

August 2014 - Math 2018

# Experience \_

#### **SLAC National Accelerator Laboratory**

SOFTWARE ENGINEER - SUMMER UNDERGRADUATE LABORATORY INTERNSHIP

Palo Alto, CA

Berkelev, CA

June 2016 - August 2016

- Machine learning via artificial neural network using Keras and Theano at the LINAC coherent light source.
- Earned the Ernest Coleman Award for "exemplary scholarship and citizenship."

#### Joint BioEnergy Institute

Emeryville, CA

COMPUTATIONAL BIOLOGY & UNDERGRADUATE RESEARCHER

June 2015 - December 2015

- · Maintained bacterial database using MySQL.
- · Characterized Rhodococcus erythropolis for type I polyketide syntheses by establishing RNAseq. Used CRISPR, Cas9 to edit E. coli

## Undergraduate Mathematics Research - University of California Berkeley

Berkeley, CA

Undergraduate Mathematics Research

January 2016 - May 2016

· Researched Hausdorff Gaps, forcing, and Universal Algebra.

## **Student Learning Center - University of California Berkeley**

Berkeley, CA

STUDY GROUP LEADER & TUTOR

June 2015 - December 2016

- Taught the Linear Algebra and Differential Equations to undergraduates.
- · Tutored Algebra, Single Variable and Multivariate Calculus, Linear Algebra, Differential Equations, and Discrete Mathematics.

#### **Bio-Sciences Researcher - Louisiana State University**

Shreveport, LA

RESEARCH ASSISTANT & DATA ANALYST

October 2011 - June 2014

- Data analysis with the Computer Science Department through the Post-Katrina Sci-Net Grant using Prism 6.0.
- · Used the glutathione pathway to study anti-angiogenic and sulfide donating properties of thiosulfate. Cultivated HUVECs to calculate sulfide concentrations using MBB, HPLC method. Performed BrDU/glutathione assays.
- Awarded Iota Sigma Pi Outstanding Woman in Chemistry Award, and Intel Science Talent Search Semi-Finalist.
- DOI: 10.1016/j.niox.2015.02.014 DOI: 10.1016/j.freeradbiomed.2013.10.571 Publications:

# Extracurricular Activity \_\_\_\_\_

#### **MUSA - Mathematics Undergraduate Students Association**

Berkelev, CA

Berkeley, CA

Berkeley, CA

MEMBER & OUTREACH CHAIR 2016-2017

August 2016 - PRESENT

## **PEACE Tutoring - Peers Espousing Amiability Cooperation and Education**

MEMBER & PRESIDENT 2016-2017

January 2015 - November 2016

# WiSE - Women in Science and Engineering Theme Housing Program

August 2014 - May 2015

MEMBER & WISE ONE CONFERENCE ORGANIZER

#### **Alpha Chi Sigma Professional Chemistry Fraternity**

Berkelev, CA

MEMBER

August 2015 - PRESENT

# Courses and Skills

Programming	Mathematics	Courses	Courses cont.	Hobbies
Python	Numerical Analysis	CS 61A/B, 170	IEOR 192, 195	Archery
HTML/CSS	Partial Diff. Eq.	Math 104,110,113,185	Chem 103,112A,301C	Hiking
Java	Algebraic Geometry	Math 126,143,301C		Lame Math Jokes
	Real/Complex Analysis			