

MATHEMATICIAN · SOFTWARE ENGINEER · EDUCATOR

**Education** \_

**University of California - Berkeley** 

Berkeley, CA

B.A. IN APPLIED MATHEMATICS, MINOR IN COMPUTER SCIENCE

August 2014 - Math 2018

I inkedin.com/in/aleskova

**Experience** \_

**SLAC National Accelerator Laboratory** 

Palo Alto, CA

SOFTWARE ENGINEER - SUMMER UNDERGRADUATE LABORATORY INTERNSHIP

June 2016 - PRESENT

• Machine learning via artificial neural network using Keras and Theano at the LINAC coherent light source.

□ (+1) 318-364-6730 | ■ aleskova@berkeley.edu | 💣 aleskova.me | 😱 github.com/aleskova

• Earned the Ernest Coleman Award for "exemplary scholarship and citizenship."

## **Undergraduate Mathematical Research - University of California Berkeley**

Berkeley, CA

Undergraduate Mathematical Research

January 2016 - PRESENT

- Researched about Hausdorff Gaps, forcing, and Universal Algebra with Noah Schweber.
- $\bullet \ \ {\it Currently researching Representation Theory with Professor Nicolai \ Reshetikhin.}$

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

Berkeley, CA

STUDY GROUP LEADER & TUTOR

June 2015 - PRESENT

- Teach the Linear Algebra and Differential Equations study group section to undergraduates.
- · Tutor Algebra, Single Variable and Multivariate Calculus, Linear Algebra, Differential Equations, and Discrete Mathematics.

#### **Joint BioEnergy Institute**

Emeryville, CA

COMPUTATIONAL BIOLOGY & UNDERGRADUATE RESEARCHER

June 2015 - December 2015

- · Characterized Rhodococcus erythropolis for its type I polyketide syntheses by establishing RNAseq.
- Used CRISPR, Cas9 to edit E. coli and organized bacterium data using Java, Python 2.0, MySQL, and FFX.

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

Shreveport, LA

RESEARCH ASSISTANT & DATA ANALYST

October 2011 - June 2014

- · Preformed 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 awarded Intel Science Talent Search Semi-Finalist.

# **Extracurricular Activity**

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

Berkeley, CA

MEMBER & OUTREACH CHAIR 2016-2017

August 2016 - PRESENT

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

Berkeley, CA

MEMBER & PRESIDENT 2016-2017

January 2015 - PRESENT

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

Berkeley, CA

Мемвея

LATEX

August 2015 - PRESENT

## **WiSE - Women in Science and Engineering Theme Housing Program**

Berkeley, CA

MEMBER & WISE ONE CONFERENCE ORGANIZER

August 2014 - May 2015

## Courses and Skills \_\_\_\_\_

Programming	Mathematics	Sciences	Language	Misc.	Hobbies
Python	Numerical Analysis	Organic Chemistry	English	Terminal	Archery
Scheme	Linear Algebra	Inorganic Chemistry	Russian	Leadership	Hiking
Java	Partial Diff. Equ.	Physical Mechanics	French	Web Design	Lame Math Joke

MatLab Algebraic Geometry

Real Analysis