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## **EDUCATION**

#### TRINITY COLLEGE

BS IN MATHEMATICS

BS IN COMPUTER SCIENCE

Expected May 2017 | Hartford, CT Cumulative GPA: 3.5 / 4.0 Major GPA (Math): 3.7 / 4.0

# NANJING FOREIGN LANGUAGE SCHOOL

Grad. June 2013 | Nanjing, China

# **PUBLICATION**

S.E. Anderson, **Y.Guo**, A. Rubin, K. Wash. "Prime Factorization and Domination in the Hierarchical Product of Graphs",

**Discussiones Mathematicae Graph Theory**. Accepted, 2016.

# COURSEWORK

### **MATHEMATICS**

Complex Analysis

Analysis I & II

Numerical Analysis

Abstract Algebra I

Mathematical Statistics

Probability

Linear Algebra

(Tutor @ Aetna Quantitative Center)

Calculus I. II & III

(Tutor @ Aetna Quantitative Center)

#### **COMPUTER SCIENCE**

Analysis of Algorithms
Theory of Computation
Mobile Computing
Software Engineering
Computer Networks
Event Driven Programming
Visual Computing
(Teaching Assistant)

## SKILLS

### **PROGRAMMING**

Over 5000 lines:

Java

Over 1000 lines:

Matlab • Python

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Familiar:

Android • iOS

MySQL• Assembly

## RESEARCH EXPERIENCES

#### **NEURAL NETWORKS AND VISUAL RECOGNITION**

Sep - Dec 2016 | Dr. E. Goldwyn | Trinity College | Hartford, CT

- Examined Linear Classifier using SVM (Support Vector Machine) and Softmax for image classification and evaluated their loss functions.
- Implemented Convolutional Neural Network for higher accuracy in image classification using the CIFAR-10 image dataset.

#### PITCH MAESTRO--ANDROID APPLICATION

Sep – Dec 2016 | Dr. R. Morelli | Trinity College | Hartford, CT

• Developed an Android application PitchMaestro, a combination of a pitch detector and a music note player

# PRIME FACTORIZATION AND DOMINATION IN THE GENERALIZED HIERARCHICAL PRODUCT

May - Aug 2016 | Dr. K. Wash | Trinity College | Hartford, CT

- Investigated whether each of the important algebraic properties of the Cartesian product carried over to the generalize hierarchical product.
- Gave preliminary results on the domination number of specific generalized hierarchical products.

## SELECTED PROJECTS

#### STATISTICAL ANALYSIS ON THE MATH PLACEMENT EXAM

May - Jul 2016 | Dr. P. Russo & Dr. E. Goldwyn | Trinity College | Hartford, CT

#### REGRESSION ANALYSIS ON THE TICKETMASTER DATASET

Apr 2016 | DataFest 2016 | Wesleyan University | Middletown, CT

## INTERNSHIP EXPERIENCES

#### NANJING LES I.T. CO., LTD | DATABASE MAINTAINER ASSISTANT

Aug - Sep 2016 | Nanjing, China

- Regulated information format in database and eliminate and restore illegal input for subsequent profile review process.
- Modified rule modules in Java to meet changing requirements from clients.

#### PING AN BANK CO., LTD | CREDIT ANALYST ASSISTANT

Dec 2015 - Jan 2016 | Shanghai, China

- Analyzed borrowers' financial conditions relative to performance, repayment ability and trends.
- Assisted director in data accumulation and tracking of balance sheet and income statement.

# HUAWEI TECHNOLOGIES CO., LTD | DATA ENGINEER ASSISTANT

Jul - Aug 2015 | Nanjing, China

- Maintained data integration pipelines for large amounts of temporal data.
- Designed web to facilitate easy access to data and monitored data quality.

# HONORS & AWARDS

- 2013-16 Financial Aid of \$40,000 for each year
- Jun 2016 Musical Presentation at the opening ceremony of Gruss Music Center
- May 2016 Second Prize of the Phi Gamma Delta Prizes in Mathematics at Trinity College
- Apr 2016 First Place of the 8th Annual Northeast Regional
  - Undergraduate Mathematics Competition
- Nov 2014 Piano Performance of Northeast Deans Annual Meeting at Trinity College