# Diwas Timilsina

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## **EDUCATION**

### **WILLIAMS COLLEGE**

**BA IN COMPUTER SCIENCE AND** 

#### **MATHEMATICS**

Expected June 2016 | Williamstown, MA Dean's List (Fall 2012-present) Class of 1960s scholar in computer science (Fall 2014, Spring 2013)

## BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS

Spring 2015 | Budapest, Hungary

## LINKS

gitLab:// diwastimilsina LinkedIn:// diwastimilsina

## COURSEWORK

### **COMPUTER SCIENCE**

Advance Programming and Data Structures
Introduction to Web Programming
Algorithm Design and Analysis
Computer Organization
Machine Learning
Principles of Programming Languages
Computational Graphics
Theory of Computation
Mobile Software Development
Compiler Design
Computer Networks
Honors Thesis

### **MATHEMATICS**

Multi-variable Calculus Discrete Mathematics Linear Algebra Real Analysis Abstract Algebra Graph Theory and Applications

## **SKILLS**

### **PROGRAMMING**

Proficient in:

Java • JavaScript • Swift Python • C/C++ • LaTex

Significant Familiarity with : Scala • ML • Lisp • SQL • Rails

### WORK/RESEARCH EXPERIENCE

## ACADIAN ASSET MANAGEMENT | Machine Learning and Natural Language Processing Research Intern

June 2015 - Current | Boston, MA

• Designing sentiment analysis tools and machine learning models to analysis the forward-looking statements in the MA&A section of annual financial performance report called 10-K filed by companies to predict the companies' future prospective.

## WILLIAMS COMPUTER SCIENCE | SUMMER RESEARCH INTERN

June 2014 - Aug 2014 | Williamstown, MA

• Started working to build machine that looks like a multiprocessor, but the processing nodes are FPGAs that can be programmed to implement a particular computation. The work will be continued as honors thesis starting fall 2015.

### **ART OF STAT | WEB APP DEVELOPER**

September 2013 - May 2014 | Williamstown, MA

• Worked to develop different stat web application for the artofstat website run by Prof Klingenberd from Williams Statistics Department.

### WILLIAMS STUDENT ONLINE | WEB DEVELOPER

September 2013 - current | Williamstown, MA

• Work to Maintain WSO website, one of the nation's oldest online student communities, used by Williams community for communication and discussion purposes.

## PROGRAMMING PROJECTS

### **DINING HALL APP | IOS MOBILE APPLICATION**

June 2015 - Present

Working on an iOS app for the dining halls of Greenwich Academy and Brunswick School. The app will be available on the app store by the end of summer of 2015.

### PROCEDURALLY GENERATED CITY

Nominated for Wards Award for best student project 2015 October 2014

Procedurally generated city model in G3D, a commercial grade C++ 3D engine. A video of the generated city can be found here. The presentation slides of the project can be found here.

### PROCEDURALLY GENERATED MAP FOR MIRRORS EDGE GAME

December 2014

Procedural Map generator for Mirror's edge game. A video of the generated level can be found here. The presentation slides of the project can be found here.

### MACHINE LEARNING ALGORITHMS

September-December 2014

Implemented the following algorithms: Naive Bayes Learner and Classifier, Linear Regression for real values, Backpropogation algorithm with one hidden layer, Ada boost algorithm to train any weak learner, and K-means algorithm.

### **ARM VIRTUAL EMULATOR**

November 2013

A virtual emulator for a RISC processor called WArm(Williams Academic Risc Machine) on a CISC processor called WIND (Williams Instructional Demonstrator) to simulate the program execution on a RISC processor.