

# Lazu Horatiu

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## EDUCATION

**WILLIAM LYON MACKENZIE CI  
MACS (MATH/CS) PROGRAM**  
Grad. June 2016 | Toronto, CA

## SKILLS

### PROGRAMMING LANGUAGES

Experienced:

Java • Turing • Visual Basic • Visual C#

Familiar:

Objective-C • C/C++ • Assembly 8085 •  
Python • Javascript

### TECHNOLOGIES

Experienced:

exp4j • VEX • NXT • Arduino • Git •  
JavaDoc • hsa

Familiar:

Android/WP SDK • Xcode • Terminal •  
HTML • CSS • Batch • Unity Engine •  
LaTeX

### CERTIFICATIONS

- Cisco IT Essentials
- FIT Software Design and Development
- FIT Network Systems and Operations

### VOLUNTEERING

- Youth Advisory Group (2012-Present)
- Math/CS Tutor (2011-Present)

### HOBBIES

- Software Development
- Road Cycling

### AWARDS / DISTINCTION

- SAGE Best Startup Award (2015)
- CCC Metro Toronto Champion (2014)
- Peer Tutoring Award (2014)
- Honour Roll (2010-2015)

## LINKS

GitHub:// **MathBunny**

LinkedIn:// **HoratiuLazu**

YouTube:// **SoftwareEngenius**

Strava:// **@HoratiuLazu**

## EXPERIENCE

### COMPUTER PROGRAMMING TEAM | PRESIDENT

September 2013 - Present | William Lyon Mackenzie CI

- Lead club with over 120 members, organized weekly computing contests
- Delivered lectures related to algorithms and data structures
- Created HTML/CSS website (tinyurl.com/mackenzie-cpt)
- Organized school-wide Hour of Code, over 140 participants

### SPITSTRIPS | SOFTWARE DEVELOPER

September 2015 - Present | Toronto, ON

- Worked with IT team to develop website (spitstrips.com)
- Created dp-filter web app to impose image and company logo with jQuery/CSS
- Developed software that does colorimetric analysis for detection of saliva alcohol concentration with RGB color calibration
- Utilized regression analysis on RGB readings from images to achieve accuracy

### MATH CLUB | EXECUTIVE

September 2015 - Present | William Lyon Mackenzie CI

- Assisted in club meetings, made HTML/CSS site (tinyurl.com/mackenzie-math)
- Developed contest registration system with automated email confirmation and unique registration ID
- Contest participation rates up 100% due to registration system

## PROJECTS

### KARNAUGH MAP SIMPLIFICATION SOFTWARE | JAVA

August 2015 - Present | GitHub Available

Visually simplifies boolean algebra expressions. Currently experimenting using Quine-McCluskey technique and graph theory to optimize pairing.

### NEWTON RAPHSON APPROXIMATION UTILITY | JAVA, EXP4J

October 2015 - January 2016 | GitHub Available

Application that finds the root in any algebraic expression, using Newton's Approximation. Parses expressions using exp4j, input error-trapped through UI

### SYNTHETIC DIVISION CALCULATOR | JAVA

Mar 2015 - April 2015 | GitHub Available

Application that can compute the division of any set of polynomial expressions. Shows full solution in JTable, sorts and formats expressions

### BASILISK | UNITY ENGINE, JAVASCRIPT, C#

February 2013 - September 2014

3D snake game with various game-modes including local multiplayer up to 6 players. Mobile optimized (iOS, Android), creative menus, works on web

## ADDITIONAL SIDE-PROJECTS

2016	Various Robots	Maze Traverse, Sumobots with mBot, VEX & Arduino
2014	Atomic Smasher	Particle simulation game made in Java (Team)
2014	Tower of Hanoi	Classic game of Tower of Hanoi made in Java
2014	Lyon's Den App 2.0	School iOS App for WL Mackenzie CI (Team)

## COMPUTING CONTESTS

2015	Top-50 Nationally	Canadian Computing Competition (Senior)
2014	First Place	Canadian Computing Competition (Junior)