# 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 • Assembly 8085

## **TECHNOLOGIES**

Experienced:

exp4j • Unity Engine • VEX • NXT • Arduino • Git • Javadoc • hsa • LATEX

Familiar:

Android/WP SDK • Linux • HTML • CSS

## **CERTIFICATIONS**

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

# INTERESTS/HOBBIES

#### 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 CodeForces:// MathBunny

# REFERENCES

Available Upon Request

#### **EXPERIENCE**

#### **COMPUTER PROGRAMMING CLUB | PRESIDENT**

September 2013 - Present | William Lyon Mackenzie CI

- Coordinate and organize lessons for club with over 100 members
- Host weekly computing contests
- Created HTML/CSS website (tinyurl.com/mackenzie-cpt)
- Organized school-wide Hour of Code, over 140 participants

#### **AUDIO / VISUALS TEAM | PRESIDENT**

June 2014 - Present | William Lyon Mackenzie CI

- Coordinated, recruited and trained tech team for Mackenzie
- Setup for assemblies, school events and shows
- Designed HTML/CSS site to request tech, used by administration and clubs

## **ROBOTICS TEAM** | PRESIDENT

September 2015 - Present | William Lyon Mackenzie CI

- Lead team to construct sumo-bots for MSEO (Middle School Science Olympics)
- Prepared event, promoted Robotics, Engineering and Programming

#### MATH CLUB | EXECUTIVE

September 2015 - Present | William Lyon Mackenzie CI

- Helped create lessons, communications, made HTML/CSS website
- Website led to rise in contest participation rates, up to 100%

# **PROJECTS**

## KARNAUGH MAP SIMPLIFICATION SOFTWARE | JAVA

August 2015 – Present | GitHub Available

Graphically 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

2015	Various Robots	Maze Traverse, Sumobots with NXT, 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	Lvon'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)