

# Joshua Allum

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## - SUMMARY OF QUALIFICATIONS -

### Leadership Skills

Developed through 3 years as troop leader of 40+ scouts, planning activities and coordinating events.

### Software Development Skills

More than two years of experience using JavaScript, Node.js, Python, Angular, React, Git and  $\LaTeX$  in production projects both paid and unpaid for non-profit.

### Communication Skills

Expert communicator with multicultural background of diverse perspectives.

### Problem Solving

Natural problem solver with drive to take ownership of problems.

## - ACHIEVEMENTS -

2014 | 10<sup>th</sup> overall in the Caribbean CAPE, Computer Science Unit 1.

2018 | Watson Build Qualifier  
Qualified for Build Round of Watson Build 2018 with possibility to showcase at PartnerWorld 2019.

2013 | Chief Scout Award  
Awarded by the President of Trinidad and Tobago.

2015 | National Scholarship Winner  
Awarded based on exceptional performance in CAPE.

2014 | World Scout Jamboree  
Represented T&T internationally at the 23<sup>rd</sup> WSJ in Japan.

2012-16 | Music Festival Champions  
Winner with HMSE of biennial T&T Music Festival consecutively.

## - CLUBS -

2017→ | ACS  
Web dev and exec member of Assoc. of Caribbean Students.

2016→ | Caribbean Tech Forum  
Contributing member of small community of tech enthusiasts.

## - EDUCATION -

Honours Computer Science Co-op,  
University of Waterloo, expected Winter 2021  
Cumulative Average: 86.62%  
Faculty Average: 90.00%

## - WORK EXPERIENCE -

Massy Technologies InfoCom | Software/Data Science, May 2018 →

- Created InvioBox, a convenient DropBox-like service that will be available in all InvioCloud packages, Massy's Cloud Computing offering.
- Used data mining techniques such as Market Basket Analysis and Cluster Analysis to integrate into Massy Stores' expansion into online sales by predicting customers' cart and recommending items.
- Produced statistics and tangible metrics of inter-branch performance based on large datasets of transactions using Pandas, Plotly, Watson.

UWBlueprint | Project Developer, January 2018 →

- Collaborating to produce software solutions for NPOs.
- Created and shipped mobile app for Ontario Secondary School Dance-Fest for judges to record real-time audio adjudications during dances and score participants in one coherent, offline capable interface.

Teleios Systems Limited | Software Dev Intern, June 2017 - Aug 2017

- Contributed to full solution for the govt of Bahamas' new NHI program by developing a .NET core web service to validate and sync user info between Bahamian databases with transient-fault-handling via Polly.
- Prepared and hosted the company's 10<sup>th</sup> Power Hour Live session, a live discussion/showcase of current, exciting technologies.
- Created Teleios Code Jam bot using MS Bot Framework and Luis.ai. Deployed to TCJ Facebook page and Cortana.

## - PROJECTS -

ArgonJS-Playground | Argon.js, NodeJS, A-Frame, Socket.io, LUIS.ai

- Developed AR scene using Argon.js with NodeJS backend server that accepts API requests to modify the virtual scene.
- Used Socket.io to emit scene modifications to all connected users so objects of the world are modified simultaneously for all users.
- Demoed app using bot created with MS Bot Framework and LUIS.ai to send appropriate API requests using natural language.

Incident Reporter | Expo, React-Native, NodeJS, Firebase, GCP

- Built for the Chaguanas Borough Corporation as part of initiative for Chaguanas to become Trinidad's first Smart City.
- Integrated user Camera and Location to facilitate real-time reporting of incidents served to Firebase to be immediately visible to the CBC.
- Implemented upvoting and incident status systems to facilitate transparent two-way communication between citizens and authority.

STAT 230 Course Notes |  $\LaTeX$

- Creating fully-fledged book including proofs, theorems, graphs and original examples, for STAT 230 at UW in  $\LaTeX$ .

## - ACTIVITIES -

2009→ | Holistic Music School Ensemble

Semi-professional lead flautist in jazz, folk and locally oriented band. Toured internationally and performed at prestigious Tobago Jazz Festival.

2009-15 | First Trinidad Sea Scouts

Taught recruits oarsmanship, kayaking, sailing, pioneering and scouting. Experience includes over 40 hours of community work including beach clean ups, charity events and life guarding services.