Josh Stein

Electrical and Computer Engineering Graduate

Summary

Recent engineering graduate with interests in artificial intelligence, biomedical engineering, computer programming, teaching and magic. I'm a curious and driven person, who enjoys being immersed in difficult problems.

When I'm not working/teaching I enjoy reading, surfing, hiking and swimming.

Education

BSc, Electrical and Computer Engineering

2016 - 2019

University of Cape Town

Graduated with first class honours. Made the Dean's merit list for years 1-3.

MBChB 2014 - 2016

University of Cape Town

National Senior Certificate

2011 - 2013

Herzlia High School

Matriculated with 9 distinctions - Mathematics (incl. P3), Physical Sciences, Life Sciences, Information Technology, History, English, Afrikaans and Life Orientation.

Magic 2007 - 2013

College of Magic

Graduated from Cape Town's College of Magic, a world-class institution dedicated to teaching magic and performance.

Experience

College of Magic

2014 - Present

Teacher

Teacher of magic, illusions, performance theory and showmanship. I have taught students aged 9-17. Finding myself in multiple positions of mentor-ship, I have tried my best to nurture and guide students, cultivating their love for magic and their skills as performers.

Responsibilities have included managing multiple curricula, creating and running lessons, training students, assisting teachers, performing magic and managing events.

Amazon Web Services

11/2019 - 03/2020

Intern

3 month internship working on back-end support. I chose to work primarily in Python, although was exposed to some Ruby and Java.

I gained familiarity and competence with many native AWS services, including Lambda, Step functions, CloudWatch, API Gateway, etc.

University of Cape Town

08/2019 - 11/2019

Final year honours project

My project was focused on image segmentation for use in training semantic segmentation neural networks. Semantic image segmentation is a classic computer vision task - for this project I took two approaches. First, a purely heuristic approach (written in MATLAB), which leveraged LiDAR data to form hierarchical depth clusters, from which objects of interest could be segmented.

Second, a neural network approach (using Tensorflow) which first identified coarse bounding boxes around objects of interest and then refined the bounding boxes by clustering LiDAR data.

Superbalist 06/2018 - 07/2018

Intern

Interned for 4 weeks, working with the Growth team. We were responsible for attracting new customers to the platform and achieving higher conversion rates of existing customers. I worked on an internal web app that allowed for hyper-targeting of users. The targeting made use of SMS, email and push notifications. I worked on a both front-end and back-end aspects of the project, using a combination of Python (Django), HTML, Javascript and Zephyr. In addition, I helped launch campaigns that interfaced with other 3rd party applications. Further, I gained experience using Docker, Kubernetes and Jenkins.

Capesoft 12/2017 - 02/2018

Intern

A computer science internship which entailed learning and working with Clarion, focusing on a project that scraped web-themes and applied them to applications.

Eureka Tutors 2014 - 2016

Tutor

I started Eureka Tutors, a private company aimed at providing top quality tutors to students in need. I have tutored mathematics, physical sciences, life sciences, information technology and computer science to learners from Grade 8 to 1st year university.

Axium Education 11/2016 - 01/2017

Volunteer teacher

Volunteered as a teacher to assist with Maths and Physical Sciences for Axium Education in the Eastern Cape, South Africa.

SHAWCO Health 06/2015 - 07/2016

Volunteer

Volunteered at clinics around Zithulele, Eastern Cape delivering first line healthcare (pap smears, BP tests, heart rate, glucose tests, HIV testing/counseling, etc.).

Skills

- Python
- C++
- MATLAB
- Java
- Teaching
- Performance arts