Avi Bank

Computer Scientist

Personal Info

Website

avi-bank.com (working, kind of)

Phone

+27 82 048 48 49

E-mail

avibank1@gmail.com

Date of birth

1992-12-23

Programming Languages (**Proficient**)

Python

C

C++

Java

JavaScript

Matlab

Programming Languages (Familiar)

C#

Mathematica

VisualBasic

Markup & Data Query Languages

SQL

GraphQL

HTML | CSS | Markdown

LATEX

Systems, Protocols, Programs & Frameworks

Linux

LDAP

Docker

MPI
Intel Parallel Studio

Django

VueJS NodeJS

NodeJS

Excel Android

IOS

Skills

System Administration

High Performance Computing

Machine Learning

ARM

Nordic Semiconductor

Embedded Systems

Optimisation

Numerics Mathematics

Formal Logic

Cryptography

Applied Computational Finance

Interests

Python for Finance & Insurance

Cyber Security

Music Composition

Piano, Guitar, Cello & Drums

Cycling, Hiking & Climbing

Cooking & Baking

Inquisitive, energetic computer science specialist skilled in leadership, with a strong background in High Performance Computing, math, logic, and cross-platform coding. Seeking to leverage solid skills in collaboration, communication, and development as a computational scientist and cluster administrator.

Experience

2017 - present

HPC Instructor

University of the Witwatersrand

- Trained teams to setup and use a cluster for the national CHPC Student Cluster Competition
- Organised and maintained a cluster, for training and research at the Wits Mathematical Sciences Laboratories.
- Coached teams who placed 2nd and 1st place in the national SCC.

2018-06 -2018-08

Software Testing

O C C Development

- Responsible for system integration and user space testing of a company's operations program
- Responsible for communicating status of acceptance-tests between client and software development team.
- Responsible for test design, implementation and reporting.
- Created an automated invoice generator based on time logs for my work.

2015-12 2016-07

CSIR, Centre For High Performance Computing

CHPC international team member for ISC 2016

- Trained teams to setup and use a cluster (3 commercial servers as nodes) for the national CHPC Student Cluster Competition (CSIR)
- Organised and maintained an office with 20 commercial servers (decommissioned STAMPEDE nodes) for training and experimental use at the Wits University Mathematical Sciences Laboratories.
- Coached teams who placed 2nd and 1st place in the national SCC.

Education

2019

University of the Witwatersrand, Computer Science, B.Sc Honours

- Advanced courses taught by world class researchers, and certainly the best in the country, if not the continent:
- Machine Learning
- Computer Vision
- Digital Image Processing
- High Performance Computing
- Data Analysis and Exploration
- Reinforcement Learning

M.Woolway

Applications of Algorithms

• Honours Research: Scaling Automated Machine Learning With Parallel Algorithms Deployed to a GPU Cluster. Supervisors: H.Wang, T.Celik,

2018

University of the Witwatersrand, Computer Science, Mathematics, B.Sc

- 80 % average (Computer Science)
- Favourite area of study in computer science: Machine Learning
- Extracurricular project: machine learning integrated IoT sensors in a power meter, for road cycling.
- Ran a High Performance Computing course for students

2011

Eden College (NSC)

- 6 distinctions
- Academic honours
- Tennis squad captain
- Head Boy