

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
JinjaX

Systems, Protocols, Programs & Frameworks

Linux
LDAP
Docker
MPI
Intel Parallel Studio
Django
VueJS
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 <i>University of the Witwatersrand</i> <ul style="list-style-type: none">Trained teams to setup and use a cluster for the national CHPC Student Cluster CompetitionOrganised 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 <i>O C C Development</i> <ul style="list-style-type: none">Responsible for system integration and user space testing of a company's operations programResponsible 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 <i>CHPC international team member for ISC 2016</i> <ul style="list-style-type: none">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 <ul style="list-style-type: none">Advanced courses taught by world class researchers, and certainly the best in the country, if not the continent:Machine LearningComputer VisionDigital Image ProcessingHigh Performance ComputingData Analysis and ExplorationReinforcement LearningApplications of AlgorithmsHonours Research: Scaling Automated Machine Learning With Parallel Algorithms Deployed to a GPU Cluster. Supervisors: H.Wang, T.Celik, M.Woolway
2018	University of the Witwatersrand, Computer Science, Mathematics, B.Sc <ul style="list-style-type: none">80 % average (Computer Science)Favourite area of study in computer science: Machine LearningExtracurricular 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) <ul style="list-style-type: none">6 distinctionsAcademic honoursTennis squad captainHead Boy

