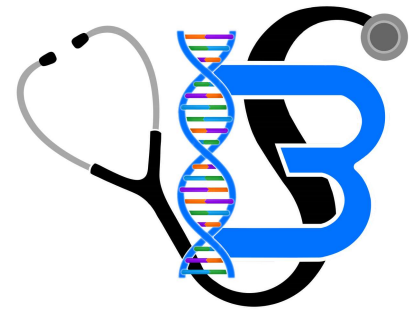


BRAD SEGAL

I am an aspiring medical student with a passion for technology and development. While studying medicine I have been working on a variety of other projects such as an automated marking and analytics suite for medical exams, a lightweight management software for student-run events and 3D printing a variety of medical models. I am an artificial intelligence enthusiast and aim to work to combine this passion alongside my medical career to develop tools to aid in patient care and streamline diagnostics.



View this CV online with links at segal.co.za

EDUCATION

2021
|
2016

Bachelor of Medicine, Bachelor of Surgery (MBBCh)

University of the Witwatersrand  Johannesburg, South Africa

- Vice President (2018 - 2019), Head of Communications (2017 - 2018) - Wits Students' Physicians Society
- IT Manager (2017 - 2019) - Wits Students' Surgical Society
- Class Representative (2017 - Present)
- Best Undergraduate Research Poster (2019)
- Best Physiology & Biochemistry Student (2018) - HS Ebrahim Memorial Award
- Best Physics Student (2017) - Isaac Kushlik Memorial Prize
- Top Ten Ranked Medical Student (2016, 2017)
- Dean's Merit List (2016, 2017, 2018)
- Golden Key Invitee (2016, 2017, 2018)

2020
|
2019

Machine Learning Engineer Nanodegree

Udacity

- Received due to being a Top Performer in the AWS DeepRacer Tournament
- Software Engineering Fundamentals
- Machine Learning in Production
- Neural Networks - Convolutional, Recurrent, Autoencoders, Transfer Learning

2019

AI Programming with Python

Udacity

- Received as a Scholarship through the African App Launchpad Programme
- Python Programming - Jupyter Notebooks, NumPy, Anaconda, Pandas, & Matplotlib
- Linear Algebra & Calculus Essentials
- Neural Networks in PyTorch

CONTACT
















 Brad@Segal.co.za

 github.com/BradSegal

 [linkedin.com/BradMaxSegal](https://www.linkedin.com/BradMaxSegal)

 [+27 791-737-867](tel:+27791737867)

SKILLS

-  Clinical Medicine
-  Research
-  Machine Learning - PyTorch, SciKit Learn
-  Data Analysis
-  3D Printing
-  Teaching / Tutoring
-  Programming:
 -  Python
 -  R
 -  Java
 -  Flutter / Dart
 -  Android
 -  JavaScript / Typescript
 -  Angular
 -  Firebase

*Last updated on 2019-12-12.
Written in R with use of the
Pagedown package.*

2015
|
2011

National Senior Certificate

King David Victory Park Highschool

📍 Johannesburg, South Africa

- Head of PR & Communication on SRC (2014 - 2015)
- Summa Cum Laude Academic Excellence Award - Aggregate over 90% in final matric examinations
- 9 Distinctions - English, Mathematics, Afrikaans, History, Information Technology, Advanced Programme Mathematics, Life Sciences, Physical Sciences, Life Orientation
- Top 1% in National Results for English & Information Technology
- Tri-Colour Honours - Academics, Debating & Community Service
- Silver and Bronze President's Award - Duke of Edinburgh's International Award



CERTIFICATES

Statistical Analysis with R for Public Health¹

Specialization, Coursera

📍 Imperial College London

- Introduction to Statistics & Data Analysis²
- Linear Regression³
- Logistic Regression⁴
- Survival Analysis⁵

Bioinformatics

Specialization, Coursera

📍 University of California San Diego

- Finding Hidden Messages in DNA⁶ (With Programming Honours Track)
- Genome Sequencing - *In Progress*

AI Programming with Python⁷

Nanodegree, Udacity

Mathematics for Machine Learning

Specialization, Coursera

📍 Imperial College London

- Linear Algebra⁸
- Multivariate Calculus⁹
- Principal Components Analysis

Deep Learning

Specialization, Coursera

📍 deeplearning.ai

- Neural Networks & Deep Learning - *In Progress*

Tensorflow in Practice

Specialization, Coursera

📍 deeplearning.ai

- Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning - *In Progress*



RESEARCH EXPERIENCE

Present
|
2019

Data Science Researcher

Biomedical Informatics and Translational Science

📍 University of the Witwatersrand

- Within this position I have worked to provide insight into a variety of medical datasets with a focus on clinical data. I have largely worked to provide automated analytics and dashboards for surgical administrative teams as well as engaging in research aimed towards extraction of clinically relevant features from surgical discharge summaries obtained from the public healthcare sector. This research has examined both typical stored values such as procedure codes, ICD codes, etc. as well text mining of free text fields through natural language processing models to predict outcomes such as patient length of stay or other clinical metrics.



GENERAL EXPERIENCE

Present
|
2017

Class Representative

Unit for Undergraduate Medical Education (UUME)

📍 University of the Witwatersrand

- In this position I have had the responsibility to both organise and represent more than 350 students at faculty level. This has necessitated the creation of mass campaigns to obtain information from numerous individuals, from personal information collection to a variety of voting procedures, all of which has enabled me to accurately and reliably present issues to faculty and find adequate resolutions that benefit the class. This has necessitated a high degree of personal commitment to organisation, requiring the creation of specialized Google calendars, centralized resources and broadcast channels through both WhatsApp & Telegram, all of which have ensured rapid mobilization of information and sharing of related resources. This has in recent years evolved to include full curriculum reviews as well as suggestions that have fed back into the creation of an improved medical syllabus.

2019
|
2016

Academic Tutor

- This contractual tutoring position has enabled me to gain an in depth understanding in the communication of ideas and concepts in a manner optimal to the audience at hand, as well as enhancing my ability to organize work both for varsity and in my private capacity. I have tutored both primary & high school students in nearly every subject offered. Since starting I've spent over 400 hours tutoring in a one-on-one configuration. In recent years I have also diversified into a private tutor and have had to organise my own network of clients amid a rather busy academic schedule.

2016

Market Trend Analyst

Matuson & Associates

- Within this temporary position, I operated as an independent trend analyst; meeting with upper management of various companies as well as performing both hands-on and off research and data handling to produce comprehensive reports on the practical implementations and ramifications of policy changes.



PUBLICATIONS, POSTERS, AND TALKS

2019

NLP Models for Length of Stay in Surgical Wards at a South African Academic Hospital

School of Clinical Medicine Biennial Research Day

📍 University of the Witwatersrand

- B. Segal, I. Mare, M. Klipin
- Awarded Best Undergraduate Research Poster



LINKS

- 1: <https://www.coursera.org/account/accomplishments/specialization/certificate/A35DY7Q87WAA>
- 2: <https://www.coursera.org/account/accomplishments/certificate/YZPK9GTX94F>
- 3: <https://www.coursera.org/account/accomplishments/certificate/Q2R7GS5AV5SY>
- 4: <https://www.coursera.org/account/accomplishments/certificate/PSBWQMWN9ERV>
- 5: <https://www.coursera.org/account/accomplishments/certificate/WPUBWJ2DRZBZ>
- 6: <https://www.coursera.org/account/accomplishments/certificate/AB4TBZQLWV4N>
- 7: <https://graduation.udacity.com/confirm/43CFE3E>
- 8: <https://www.coursera.org/account/accomplishments/verify/J894FMSKZNMNR>
- 9: <https://www.coursera.org/account/accomplishments/verify/5V9HMNJPT7N>