

CONFIDENTIAL CV - BEN BREDEKAMP

CANDIDATE OVERVIEW:

Candidate Name:	Ben Bredenkamp
Position Applying For:	Senior Data Scientist
Date of Birth:	28 November 1977
Employment Equity Status:	White Male
Candidate Nationality:	South African
Notice Period:	1 Calendar Month
Language[s]:	Afrikaans & English

PERSONAL STATEMENT

- I have built data driven models using data mining techniques in 7 verticals, teaming up with SME's in the vertical.
- I have worked on turnkey solutions, to understand and address process variation or loss. A solution in these cases are typically only viable if it can be automated, and in many cases I have had to demonstrate and deliver automation pieces for the solution. First get the business process up and running and then start coding tools for the process.
- I am a polyglot. I have coded in 23 coding languages – being paid for 18 of them.
- I see the 1000 piece picture.

EDUCATION

- 2000 - 2006: Stellenbosch University - Master's Degree, Engineering Sciences, Process Engineering
Contracted while studying to support himself
- 1999 - 2000: Stellenbosch University - Honours, Computer Science – **Cum Laude**
- 1996 - 1998: Stellenbosch University/Universiteit Stellenbosch - Bachelor's Degree, Mathematics and Computer Science
- 1995: Montana High School, Worcester - Matriculation Certificate

CERTIFICATIONS

- Machine Learning
- Programming Mobile Applications for Android Handheld Systems
- Six Sigma Greenbelt training by Rajiv Thekkumpurath
- Data Analysis

CAREER HISTORY

Mar 2017 - Present

**Standard Bank Group, Gauteng
Data Scientist – Security Engineering Team for Cyber Security
in Personal and Business Banking**

- Fraud detection: every cent that leaves the bank illegally is doing evil
- Highlights: Received a Mark of Excellence award in 2017 and in 2018 because we reduced online fraud to 80% below the industry standard; and went live with RTC in 3 weeks from joining the team
- Team sizes: 2 to 20
- Responsibilities - I am responsible for:
 - Stopping fraud automatically on the digital channel
 - Other ad hoc coding and in-depth analysis
 - Building Models – 1 very successfully built and implemented Model (Loves this side of things)
- Skills: Python, ElasticSearch, Linux Architecture, Other Coding Languages, Analytic Engineering, Machine Learning, Docker containerization

Jan 2015 - Mar 2017

Analyst Developer and Contractor at various companies

- I analysed data and developed projects for various clients
- My data analysis platforms of choice were MATLAB/Octave, MS SQL or Excel.
- My data visualization tools of choice were Excel, SSRS, or Jupyter
- My solution automation tool of choice was the windows task scheduler 2.0.
- My integration platform of choice was C#/.NET or Python. Version 2 can be the coded REST service.
- Team sizes: 1 to 4
 - Contract work in the Banking arena
 - Web scraping in property sales from data off the web
 - Android application development
- Technology used at this stage: Java, Android App development, R, Excel
- Highlights: Launching a business plan, learning Java and Eclipse, teaming with the Alberton SAB Brewing team to catchup on their malt losses.

May 2013 - Jun 2014

**Genpact, Woodmead (Took over the contract from GE)
Manager Operations**

- Team sizes: 4
 - Technical support to the USA team in fulfilling their GE contract to GE Aero
 - Delivering an automation platform for scaling MATLAB implemented algorithms against a fleet of Aero gas turbines
- Skills: MATLAB, .NET (C#), Windows Architecture, SQL, Proficy Historian, Systems Integration
- Highlights: Delivering version 1 of the MATLAB automation platform in 7Months

**Apr 2011 - Apr 2013 GE, Midrand, (Bought out CSense in April 2011)
Lead Application Engineer**

- Team sizes: 2 to 20
 - Data Modelling and Analysis
 - Solution prototype development
 - Technical product support
 - Client and Junior Engineer Coaching
 - Presenting short courses for small classes of people
- Skills: Proficiency suite, CSense,
- Data analysis, mining and modelling using Excel, SQL, C#, MS Windows Architecture
- Teaching and Selling ideas
- Analytical reasoning, Software System design, Production Process Troubleshooting,
- Software component integration; Working on a number of industrial data sets
- Highlights: Designing and Building a soft-sensor for BOD and PPS estimation at MWV incorporating uniqueness and cause calculations.
- Contributing to an Asset Monitoring system for GE Aero
- Analysing a range of data sets

**Sept 2008 - Mar 2011 CSense Systems
Product Specialist**

- Team sizes: 2 to 20
 - Data Modelling, Mining and Analysis
 - Solution prototype development
 - Technical product support
 - Client and Junior Engineer Coaching
 - Presenting short courses for small classes of people
- CSense: data mining, modelling and analysis. Excel, SQL, C# and MS Windows Architecture.
- Teaching, Selling ideas.
- Analytical reasoning, Software System design, Production Process Troubleshooting, System integration and solution construction; working on a number of industrial data sets
- Highlights: Commissioning the QMM production accounting system; Designing and Building a soft-sensor solution for Anglo Platinum; Training GE Application Engineers in India; Designing a Corrosion reporting system with MegChem; CSense getting purchased by GE in 2011

**Apr 2006 - Dec 2007 ASP Technology, Stellenbosch
Software Developer**

- Team size: 2 to 4
 - Developed a data capturing tool that could log and format request schedules
 - A tool mapping target values into a feasible delivery schedule
 - Establishing optimisation algorithms for the two tools
- Skills: Excel, VB Scripting
- Highlights: My deliverables were always completed on time, in budget and of a high standard

BEN BREDENKAMP

Sept 2004 - Jul 2007 Stellenbosch University, Stellenbosch, South Africa
Research Assistant – while studying

As a research assistant at the Department of Process Engineering:

- I worked in team sizes of 2 to 3
- I was responsible for:
 - A number of research reports and posters
 - Software development support for research activities
 - Applications, usage and operation of the MegaPlus ES 1.0 high speed digital camera
- Skills: MATLAB, R, Cygwin, SQL, MSOffice, Excel,
- Data analysis and modelling, Analytic reasoning, Report writing, Digital imagery
- Highlights: Completed my first draft for a publication and resourceful problem-solving programme

May 2003 - Dec 2007 Mintek, Johannesburg
Software Developer and Tester – While studying

- Team size: 2 to 3
- I was responsible for the development of the Neural Networks toolbox in the StarCS control system. The toolbox was built using techniques developed by Professor Aldrich and serves the purpose an automated system identification tool
- Skills: C/C++, MATLAB, XML, Visual Studio, Excel
- Highlights: My deliverables were always completed on time, in budget and of a high standard

EXTRA-CURRICULAR ACTIVITIES

- I am a committed family man
- Athletics: I was on the under 19 top 20 list for the 1500m in RSA for the 1995/6 season
- Choir: Member of Canticum Novum-choir - Stellenbosch, 1998 - 2001
- Member of the South African Go Association since Jul 2004. I hold a rank of 1 kyu with SAGA

TOP SKILLS

- Data Mining, Data Modelling, System integration, Software Development

CURRENT INTEREST

- Growing a team
- Systems integration
- Python; Data Analysis
- Data Mining and Modelling; solving complex, multi factorial problems
- Working in cross-functional teams
- Doing a PhD; Big Data