



# ANDRE PIERRE CHRISTOPHER STEMMETT

SOFTWARE DEVELOPER ; CIVIL ENGINEER

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GITHUB: <https://github.com/AndreDrDre>



## EDUCATION

*(Jan 2015 – Jan 2019)*

Stellenbosch University

Bachelor of Engineering (BENG) (CIVIL) (4yr, incl. Honours)

**Thesis** : Photo Voltaic Object Model – Domestic application/feasibility



## WORK EXPERIENCE

### **FULL STACK SOFTWARE DEVELOPER**

*(Feb 2021 – present)*

***Employer: Win Aviation***

***Location: Arizona, Illinois USA***

Designed and developed an Enterprise Resource Planning (ERP) system for the aviation industry. The system was designed and created using the Django Framework and Agile development methodology. The application is centred around work-orders allowing a strict distribution of resources. The system was designed to operate in accordance with the Federal Aviation Administration (FAA) part 135. An estimated 20-30% increase in productivity will be achieved as well as 15% saving in material costs.

Designed and developed an Audit tracking software for the aviation Industry. The system was created in Django using the rapid application development method. The programme is responsible for handling external and internal Audits as well as tracking certifications and requirements associated with each employee. An estimated 15% productivity boost will be achieved. The system was developed in a strict nature to prohibit internal manipulation as required by the client.

### **SOFTWARE DEVELOPER/DATA ANALYST**

*(June 2020 – Nov)*

***Employer: MicroCare***

***Location: Port Elizabeth, South Africa***

This job description encapsulates the entire design process associated with a PV solar installation up to and including a capacity of 1MW. The process included: Data analysis, cleaning and sorting; electrical calculations pertaining to system design; report writing, client facing and relationship building. Through careful application of the above mentioned, an annualized ROI of between 7-12% was realized with a maximum payback period of 7 years. A link to an example report can be found in the drop box link. Designed and created the company website with Avada Theme Fusion (<http://microcare.co.za>)

## **SOFTWARE DEVELOPER**

*(March 2020 – June)*

**Employer:** *Engineering Advice & Services*

**Location:** *Port Elizabeth, South Africa*

Re-Design a cross-platform road survey Application which will adhere to the regulations and guidelines set by COTO South Africa. The Application is set to be used throughout the country by various Civil and other engineering related sectors.

## **JUNIOR PROJECT MANAGER**

*(June 2019 – November)*

**Employer:** *Engineering Advice & Services*

**Location:** *Port Elizabeth, South Africa*

Managed and coordinated the development of 25 small residential properties (New Horizon Villages, Parsonsvelei, South Africa), by increasing productivity by 30% and reducing the cost of inventory by approx. 10% to increase projected profits by 20%.

## **SOFTWARE ENGINEER/DATA ANALYSTS**

*(March 2019 – June)*

**Employer:** *Engineering Advice & Services*

**Location:** *Port Elizabeth, South Africa*

Participated in the design and implementation of a cost analysis and ordering program, using VB.NET and MySQL. The program sort to achieve: An accurate cost comparison; A predictive model connecting time, cost and profit; The elimination of redundant tasks to increase productivity.

Designed and developed a water loss management program, using Visual Basic and by obtaining data from various Flotron Q-loggers, resulting in a 20% decrease in consumption rate and a 70% higher probability of leak detection within a defined mitigation period.

Designed and created PRV (Pressure Relief Valve) water loss chambers by performing pressure calculations in relation to available water per area per time duration. Civil Designer and AutoCAD were used to provide the Kouga municipality with a 20% more efficient water usage curve.

Designed and partially developed a feasibility calculator using Visual Basic and Android Studio, by receiving consumption data, to achieve a full PV domestic solution. Results concluded a 5-year payback with exponential savings thereafter.



## **SOFTWARE TOOLS**

- Python
- C# (Mobile Dev)
- HTML
- CSS
- JQuery
- Ajax
- JavaScript
- Django
- React
- AWS
- Heroku
- Digital Ocean
- MATLAB
- Bootstrap4
- Word Press (basic)
- PostgreSQL
- MySQL
- REST APIs
- Jupyter Notebook
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## PASSION PROJECTS

### Mobile App (Android/iOS)

1. A Polaroid application designed to capture special memories and add tags/comments to those memories. View your Polaroids digitally through a slide show.  
(<https://github.com/AndreDrDre/PolaroidAPP>)
2. An Application designed to record the Employee Fuel slips so as to mitigate the tiresome process associated claiming back Fuel from your company. The application is designed to use a local Database (SQLite). An API and corresponding DB.  
(<https://github.com/AndreDrDre/Xamarin.FuelSlip>)
3. A Domestic PV Solar Solution designed to calculate the quantity required of each individual solar component as well as the topography, having received a given load measured in kWh. Further the application will determine ROI of the user specific System.

### Web Applications

1. An ecommerce site developed within the Django Framework. The site includes guest browsing where information pertaining to the guest user is stored in 'browser cookies'.
2. A logistics/stock tracking application developed for commercial use. The web application was developed within the Django Framework.
3. A portfolio website developed to host my projects and on-going progression in my career.
4. A real Estate website. Sign up, list, search, enquire and a whole lot more. Realtor of the month and analytical tracking to view backend statistics.
5. Crypto Currency News applications. View real time crypto prices as well the latest and greatest news pertaining to vast array of coins.



## OTHER EXPERIENCE

Co-founder of Dirty-Disco Events

Co-founder – Pierre Stemmett([pierrestemmett@gmail.com](mailto:pierrestemmett@gmail.com))

- Managed 2 successful events of 800 + clients.
- Ensured profitable. (40% ROI)
- Building relationships (Red Bull, Fitch & Leedes)
- Project management. Lead and coordinated a team of 20 members.



## LEADERSHIP & AWARDS

- Selected as one of four candidates for a scholarship, from Engineering Advice and Services, covering the duration of the degree.
- Acted as Junior Project Manager for New Horizon Villages, Parsonslei, for a period of 6 months.
- Selected as the team leader for a final year Project Management assignment, using the Sim4projects software package.
- Represented one of the four houses in a leadership position in Grade 12
- Attended the wakeboarding nationals in Port Elizabeth.
- Received academic honours blazer in Matric



## ABOUT ME

By virtue of both my education and other related interests, I am inclined to thoroughly enjoy creative thinking and problem solving. I desire the progression associated with obtaining new knowledge. I believe that working in a team provides an ability to use the collective power of various minds, which inevitably results in a more creative and concrete solution. I am passionate about the ever-progressing link between renewable energy and software application.

Further, I take great interest in the art of investment trading. I am passionate about relationships, creativity, software design and fitness.