# Gavin John Dollman

Gender: Male Health: Excellent Nationality: South African Date of Birth: 1983/05/27 Notice period: 60 days 21 Horeb Street LaRola Clarens, Free State South Africa <u>dollman.gavin@gmail.com</u> Home +2783 234 1299 Office (058) 718 5234 <u>https://www.linkedin.com/in/gavin</u> -dollman-17410388/



# Motivation

My philosophy for teaching is to provide practical industry related problems that students need to solve using hard and soft skills. Personally, I am interested in machine learning and it's many applications within other fields. My current project involves the creation of a predictive model that prospects for fossils within South Africa using drones and image classification. This project involves machine learning, deep learning and photogrammetry to construct these predictive models.

# Work Experience

# 2015 - Present University of the Free State

#### Lecturer, Computer Science and Informatics

My role is the administration and presentation of a number of courses within the computer science field. As an academic my responsibilities do not end in the classroom, I am expected to be a researcher and actively participate in department activities such as marketing and mentorship programs.

- Lectured various courses including Website Design, Databases I and II, Software Engineering, Design Patterns, Human-Computer Interaction and Data Structures (Advanced Programming)
- Assessed and designed assignments, exams, project and practical's
- Designed and implemented coursework according to outcomes
- Postgraduate supervisor (Four Honours and one Masters students to date)

# 2012 – 2014

# University of the Free State

Junior Lecturer, Computer Science and Informatics

- Lectured courses including Website Design, Software Engineering, Design Patterns, Human-Computer Interaction and Data Structures (Advanced Programming)
- Assessed and designed assignments, exams, project and practical's
- Designed and implemented coursework according to outcomes

# 2009 – 2012

# University of the Free State

Unit Lecturer, Computer Science and Informatics

- Lectured courses Software Engineering, Design Patterns, Human-Computer Interaction and Data Structures (Advanced Programming)
- · Assessed and designed assignments, exams, project and practical's
- Designed and implemented coursework according to outcomes

# 2008

## **Techsys Digital**

Junior Programmer, Web development, Cape Town

- Developed web applications (.Net, javascript and XHTML)
- Developed surveys (.Net)
- Developed web sites (.Net, ASP, ASP.Net, javascript and XHTML)

# 2007

## University of the Free State

Teaching Assistant, Computer Science and Informatics, Bloemfontein

- Administrative tasks
- Marked assignments and test
- Managed tutorials (NATP certified)

# **CTi Education Group**

Teacher, Computer Science, Bloemfontein

- Lectured A+
- Marked assignments and examinations

# Education

## M.Sc., Computer Information Systems, 2014

University of the Free State Bloemfontein An Exploration of the use of Brain-Computer Interfaces for Human-Robotic Interaction: A comparative study using the Emotiv headset against traditional control techniques

#### B.Com. Hons., Information Technology, 2009

University of the Free State Bloemfontein Designed and implemented a data warehouse based on the student tables of UFS PeopleSoft

#### B.Com. Information Technology, 2007

University of the Free State Bloemfontein

# Skill Overview

- Remote Piloted Aircraft Pilot and licence holder
- Machine and Deep learning approaches
- Programming ability in C#, Python, Java and ASP.NET
- Data Analysis within R and Python
- UML and ERD Design systems and databases
- Android development
- Software engineering methodologies and development skills (GitLab, Docker, Node.js, etc.)

# Academic Training

#### **SPAHLE Certification**

2009: A course on the learning principles of Outcome Based Education (OBE)

## **FLIP Certification**

2010: A more advanced course on the learning principles of OBE and modern lecturing techniques

#### **Teaching and Learning Champions Program**

2011 - 2013: Took part in the Teaching and Learning project as part of the Computer Science department.

- Piloted a project using the web 2.0 website Piazza to increase student communication to enhance interaction with the course Software Engineering
- Piloted whatsapp as an email alternative to communicate with students

#### 7 Habits of Highly Effective people

2018: Training to participate in FASSET program

# **Current Academic Service**

#### **Research Portfolio**

Chair the portfolio, organised regular department research talks and two research retreats.

#### Academic Portfolio

Plan coursework, design and implement a new (2015) computer science degree.

#### **Marketing Portfolio**

Participate in Open Day, visit schools etc.

# South African Institute of Computer Scientists and Information Technologists (SAICSIT) board member

Peer review articles for the SAICSIT conference (2016 and 2017)

#### SAICSIT Member

#### FASSET Program

Participate in a program to give additional support to undergraduate students

#### Afromontane Research Unit (ARU) Member

Mountain research spanning the Drakensberg.

# **Conference Proceedings**

Dollman, G.J., De Wet, L. and Beelders, T.R. (2011). The effects of access to technology on the usability of a BCI. In *Proceedings of the Post Graduate Symposium – SAICSIT*, Cape Town, 3-5 October 2011.

Dollman, G.J., De Wet, L., Beelders, T.R. (2013). Effectiveness with EEG BCIs: exposure to traditional input methods as a factor of performance. In: *Proceedings of the South African Institute for Computer Scientists and Information Technologists Conference,* SAICSIT '13. ACM, New York, NY, USA, pp. 77–80. doi: 10.1145/2513456.2513476

Dollman, G. J., De Wet, L., & Beelders, T. R. (2015). Commercial Brain Computer Interface: Potential As a Natural User Interface. In *Proceedings of the 2015 Annual Research Conference on South African Institute of Computer Scientists and Information Technologists* (p. 13:1–13:8). New York, NY, USA: ACM. <u>http://doi.org/10.1145/2815782.2815797</u> Dollman, G.J., Dollman, K.N., Choiniere, J.N., Raising future prospectors within rural communities (2018). *Proceedings of the 20th Biennial Conference of the Palaeontological Society of Southern Africa, Bloemfontein, 4–6 July 2018*. Retrieved from http://wiredspace.wits.ac.za/handle/10539/25516

# References

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