

# A Guiding Rubric for the Early-Career Doctoral Supervisor in Statistics

Michael J. von Maltitz<sup>1</sup>, Inger Fabris-Rotelli<sup>2</sup>, Ansie Smit<sup>2</sup>, Danielle Roberts<sup>3</sup>, Sonali Das<sup>2</sup>, Daniel Maposa<sup>4</sup>

<sup>1</sup>University of the Free State, South Africa

<sup>2</sup>University of Pretoria, South Africa

<sup>3</sup>University of KwaZulu-Natal, South Africa

<sup>4</sup>University of Limpopo, South Africa

## Abstract

Industry has been pulling statistical science graduates away from academia, and from the pursuit of further postgraduate studies. In South Africa, the industry draw has resulted in a crisis in academic capacity building within statistical sciences, with two primary factors identified as exacerbating the move away from academia: First, academic salaries in the statistical sciences are not comparable to what industry would pay at the same level of qualification (especially with the growth of 'Data Science'); Second, the lack of sufficient supervisory skills and capacity, especially for the doctoral level, is evident across South African Statistics departments. Following the discussions documented by Fabris-Rotelli et al. (2022), there seems to be an urgent need to devise guidelines to support active early-career doctoral supervisors in South Africa. In this paper, these guidelines are incorporated into a guiding rubric, and are not presented as a prescriptive set of rules, but rather a dynamic document encouraging the growth of both the novice supervisor and the doctoral candidate. This paper presents the current evolution of this guiding rubric, having recently been the subject of discussion by a focus group of intended novice supervisors within South Africa.

**Keywords:** Doctoral supervision; postgraduate research; statistical sciences, South Africa, data science