# **FAIR2019:**

# South African Forum for Artificial Intelligence Research

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**Conference Proceedings** 

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#### **Preface**

The South African Centre for Artificial Intelligence Research (CAIR) is a grouping of researchers from several disciplines and universities with a broad range of interests in AI. For the past five years, one of the collaborative activities of CAIR has been the annual Forum for AI Research, where matters of common interest are discussed by CAIR members. Since CAIR represents a range of disciplines (computer science, engineering, philosophy, information science, statistics and others) it has been a particularly fruitful forum for sharing ideas. Discussions have taken various formats, and in November 2018 it was decided that a more formal conference would be appropriate for the growing body of research output being produced by the South African AI community.

An open call for proposals was therefore circulated, and a Programme Committee constituted from senior CAIR members and other researchers with relevant interests. Contributions were solicited in five tracks (Applications of AI, Ethics and AI, Knowledge representation, Machine learning, Other topics in AI), and authors were given the opportunity to submit full papers, extended abstracts, or summaries of work in progress.

A total of 72 submissions were received, and full-paper submissions were blind reviewed by at least two independent reviewers from the relevant discipline. From these submissions, 20 papers were accepted as full papers. In addition, 34 submissions were accepted as work in progress, and 10 as extended abstracts (of work under review or published elsewhere).

It is a pleasure to thank the organisers for arranging this conference, programme committee members for ensuring that an appropriate level of rigour is maintained (while also encouraging emerging research), and especially the authors for providing the wide range of ideas that will be the core of this inaugural conference. We trust that some of the ideas herein will be of interest to each reader of these proceedings.

Marelie Davel & Etienne Barnard, Editors

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