Project: ***Spectator profiling using big data analytics for enhancing sports fandom***

Location: Victorian campus of Federation University Australia at Ballarat.

Surname:

Given name:

Address:

Telephone: Email:

Are you a current FedUni HDR candidate? Yes No

Student ID:

Successful applicants will be expected to commence by **15th October 2018.** However, the successful candidate may negotiate the commencement date.

For questions related to the research project, please contact Assoc. Prof. Madhu Chetty, (03 51228148 or [madhu.chetty@federation.edu.au](mailto:madhu.chetty@federation.edu.au))

**Conditions**

Scholarships are available for either domestic or international students. Scholarships are tax-free and full-time, with no possibility of being undertaken part-time during candidature. Students will be required to commit to a minimum of four days per week on campus and participate in occasional industry placement at key times during the term of the candidature. Scholarships are for a period of three years only. Extensions to scholarships will not be granted. An additional “tuition fee waiver scholarship” may be available for an international student.

View the general conditions of [Fed Uni HDR Scholarships on the Research Website](http://policy.federation.edu.au/research/higher_degrees_by_research/hdr_candidate_selection/hdr_candidate_selection/ch06.php). Where these conditions differ to those on this form, the conditions outlined for this specific scholarship take precedence.

**Eligibility to undertake a PhD**

To be eligible to undertake a PhD, students must meet [eligibility requirements outlined on the Research website](http://federation.edu.au/research/study-with-us/apply/check-your-eligibility). If you are applying for “[Honours equivalence](https://federation.edu.au/research/study-with-us/apply/check-your-eligibility/honours-equivalence),” please ensure that you provide detailed information to support your case.

**Referees**

Please nominate one referee who can comment on your academic and research experience and capacity, and one referee who can comment on your industry and work experience, particularly in relation to the data analytics research. Referee reports must be returned to Research Services by **Wednesday 5th September 2018**. Any applicant without referee report forms may not be considered.

**Statement**

All prospective candidates are required to provide word statement (up to a maximum of 1500 words) covering the following areas:

* Relevance of your background for the project and the motivations for the research
* Discuss the existing research literature related to the general topic area and their limitations (if any)
* Discuss relevant key tools/ techniques strategies possible for this project and identify any available methodology (or, where a methodology has not been explicitly identified, suggest a possible relevant methodology and discuss the opportunities and constraints)
* Discuss potential challenges and how you might overcome them
* Intended outcomes of the research (for yourself, the industry and the overall sports sector)

List all documents provided, including supporting information:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Required Documents |  | Other Supporting Documents |
|  | [HDR Application for Enrolment Form](https://federation.edu.au/research/study-with-us/apply/submit-your-application) |  | List of published works |
|  | 2500 word statement |  | Professional memberships |
|  | Qualifications |  |  |
|  | Transcripts |  |  |
|  | Scholarship Application (this form) |  |  |

For questions regarding the application process for scholarships and candidature, please contact Research Services at: [research.degrees@federation.edu.au](mailto:research.degrees@federation.edu.au).

**Applications for the FedUni-SportsHosts Scholarship close Friday 7th September 2018 and can be submitted via mail, email or in person**

For general scholarship and candidature information, please contact:

Graduate Research School,   
Federation University Australia,   
P.O. Box 663, Ballarat VIC 3353,   
Telephone: 03 5327 9508  
Email: [research.degrees@federation.edu.au](mailto:research.degrees@federation.edu.au)

|  |  |  |  |
| --- | --- | --- | --- |
| **Office Use** | | | |
| Graduate Research School | Date of Receipt: |  | Scholarship Registration Number:  2018 /………………….. |
| Returned to Graduate Research School | Date of Receipt: |  |

Research project outline

*Spectator profiling using big data analytics for enhancing sports fandom*

**Commencement date: October 2018**

Sports has a place at the heart of every culture. Supporting the home team is a true local experience, and an exhilarating one at that. Sport fans are so proud of their team and their city that they genuinely want to share them with the world. Game memories last a lifetime. What better way to learn about a place and its culture than with the most passionate locals? The current trend is, “Discover the local culture and feel the magic as you cheer with the home team crowd”. The research, for a Melbourne based Start-up Company, proposes to connect local fans (hosts) with travelers (guests) to go to live sports together. The idea is fueled by a passion for sport and its power to unite people from different cultures and backgrounds. Under the proposed arrangement, the start-up will provide the hosts with an opportunity to meet people from around the world, come together over sports and build their global community. From classic supporter pubs, to roaring stadiums, to post-game revelry, it is the ultimate way to have (or to share) a real, local sporting experience.

The key point of differentiation in this arrangement is that the hosts do not charge the guests mainly because they are driven by their *fandom*. Apart from being free, the arrangement meets the needs of international visitors in seeking authentic local cultural experiences. At its highest level, this is a shift from the model of *shared economy* to that of *passion economy*. The research will explore the use of advanced computational techniques such as machine learning, heuristics, big data analytics etc to develop suitable algorithms that will primarily find and engage the audience in a way that aligns and strengthens this shift to the passion economy.

Some of the research objectives will be as follows.

1. Investigate suitable big data storage paradigms to meet the requirements of various type of domain data, i.e. structured, semi-structured and unstructured. The available data may be limited and hence, as part of research, there may be need to generate suitable datasets apart from using the available datasets.
2. Develop new predictive models, statistical tools and algorithms for providing improved correlation between hosts and visitors that will enhance their satisfaction. Post-Game Day analysis of member records to identify necessary follow-on actions.
3. Algorithms in 2) to be enhanced to meet requirements of specific cohorts of fans. For example, correlation of fans based on their characteristics (age group, gender etc.) or their requirement (which country to visit e.g. Spain, or which specific sports to watch e.g. ice hockey). Additional capabilities will also need to be developed, e.g., providing options selectively using AI techniques to interested travelers of contacting locals.

Thus, the proposed research will aim to apply advanced analytics to the fans (both hosts and visitors) profiles to identify those fans who would benefit most from a proactive approach to create their lifestyle changes and . build Global Community.

**Industry Partner:** SportsHosts

**Academic Supervisor:** Assoc. Prof. Madhu Chetty (FedUni)

**Industry Co-Supervisor:** Mr Darren Walls (Industry)