

JOB DESCRIPTION

Sport Technologist

1. **JOB PURPOSE**

Summarise in one statement why your job exists; and how it contributes to the overall mission/objective of the organisation.

- To produce sport champions who will ignite the Singapore Spirit by implementing Sport Technology Solutions to identified sport programs

2. CRITICAL ACCOUNTABILITIES

List the responsibilities (Key Result Areas and the major activities) that must be achieved in order that the job purpose is fulfilled. For each KRA, document the performance measure(s) (i.e., outcomes) which indicate successful accomplishment of that KRA.

KEY RESULT AREAS (KRA)	MAJOR ACTIVITIES	OUTCOME/ DELIVERABLE
<p>1. Service Delivery: Provide high-quality, sport-specific, evidence-based and performance-focused services, to address issues identified by coaches and athletes via the development and utility of sport technology</p>	<ul style="list-style-type: none"> • Needs assessments for development of support proposals to sport programs • Individualised laboratory- and field-based testing • Report and interpret testing results to coaches and athletes for practical applications • Develop and source for novel technology (hardware and software) that would facilitate the capture of sport performance data (Biomechanical, Nutritional, Psychological, Physiological, Strength etc.) and the visualization of that data • Conduct performance analysis using a range of software • Lead other specialists (across disciplines) and ensure there is integration of support to sport programs 	<ul style="list-style-type: none"> • Sport performance results • Feedback from coaches and athletes • Peer (intra- and inter-discipline) review and feedback • Strategy to move ideas into prototypes • International recognition • Integration of multidisciplinary support (i.e., Lead Scientist role for priority sports)
<p>2. Research & Development: Establish a robust R&D roadmap focused on strategic requirements and targeted issues that will enhance medal winning opportunities.</p>	<ul style="list-style-type: none"> • Build R&D work into ongoing support and service delivery to sport programs • Independently manage research programs and attract grants and collaborations • Conduct applied research to answer targeted questions by sport programs • Conduct upstream research with a sport performance and technology focus in collaboration with Universities and Research Institutes to remain at the forefront of scientific enquiry • Conduct exercise- and health-related R&D with a sport performance and technology focus that will impact the larger Singapore community (i.e., general public). • Supervise R&D work as part of students' Final-Year Project, Masters or PhD. 	<ul style="list-style-type: none"> • Applications of technology by sport programs (or general public) • Presentations at local and international conferences • Publications in peer-reviewed scientific journals (as first author) • Involvement with scientific journals (e.g., reviewer, editorial board member, associate editor, etc.). • International recognition

3. Education	<ul style="list-style-type: none"> • Develop and deliver educational materials • Educate coaches, athletes and students. • Teach and mentor fellow peers, interns and trainees. 	<ul style="list-style-type: none"> • Factsheets, brochures, books, PowerPoints, etc. • Workshops and courses • Accredited supervisor and mentor
4. Capability Development	<ul style="list-style-type: none"> • Identify knowledge gaps and resources to bridge these gaps • Establish and implement a career pathway based on best practices and international standards • Provide opportunities to grow the pool of expertise in Singapore 	<ul style="list-style-type: none"> • Engagements with local and international domain experts • Participation in continuing education (e.g., seminars, workshops, conferences, attachments, etc.) • Recognised as a technical expert within the sport technology/science fraternity and participates in international exchanges and conferences

3. MAJOR CHALLENGES

Describe the major challenges you face in carrying out your job, and what you do in order to overcome them.

- Overcoming resistance and misconstrued notions of Sport Technology and its scope and benefits
- Measuring the level of impact on results based on inputs
- Juggling time constraints understanding multiple sports and sport science disciplines whilst managing other expected department, division and organisational commitments and requirements.

4. KEY DECISIONS/DIMENSIONS

a. Describe 1 or 2 typical decisions you have to make, in the course of your job.

- Ascertain appropriate needs analysis of sport programs in order to develop appropriate evidence-based education, interventions and support (across disciplines) for the benefit of the athletes and coaches from a wellbeing and performance-focused approach.

b. List the data which will reflect the scope and scale of activities concerning your job.
(*These should be quantifiable numerical amounts*)

- Must be able to synthesize large amounts of data captured using different instruments. Must be able to program/script effectively to perform automated webscraping, machine learning and statistical analyses.

5. SKILLS AND KNOWLEDGE

State the minimum acceptable proficiency for this job. Do not state incumbent-specific information

EDUCATIONAL QUALIFICATIONS & EXPERIENCE

- Undergraduate Sport Science/Engineering/Computer Science or related degree
- Postgraduate degree in Sport Science/Engineering/Computer Science or related specialty
- Desirable to have a minimum 3 years of working experience as an Engineer/Computer Scientist/Technologist/Biomechanist in Sport with strong background in the application of progressive, evidence-based scientific support to individual athletes, teams and coaches, in a high-performance sporting environment.
- Good background knowledge and understanding of other sport science disciplines such as physiology, nutrition, psychology, and strength & conditioning.

PERSONAL CHARACTERISTICS & BEHAVIOURS

- Demonstrate the commitment to sporting success in high performance sport
- Demonstrate good oral and written communication skills, effective negotiation and consultation skills, open and dedicated to engaging in respectful and effective relationship building with stakeholders from diverse sports and backgrounds.
- Demonstrate the ability to lead, educate and motivate athletes and coaches to embrace scientific support
- Highly professional and ethical approach
- High levels of initiative and responsibility
- Self-motivated and able to work independently and as part of a team
- Willingness and ability to work unconventional hours and undertake overseas assignments

Interested applicants, please contact:
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