



## POSITION DESCRIPTION

Department of Medicine, St Vincent's Hospital  
Faculty of Medicine Dentistry and Health Sciences

### Graduate Developer – Health Informatics

<b>POSITION NO</b>	0043789
<b>CLASSIFICATION</b>	PSC 5
<b>SALARY</b>	\$68,892 - \$79,130 p.a.
<b>SUPERANNUATION</b>	Employer contribution of 9.5%
<b>WORKING HOURS</b>	Full-time
<b>BASIS OF EMPLOYMENT</b>	Fixed-term for 12 months Fixed term contract type: Externally-funded contract employment
<b>OTHER BENEFITS</b>	<a href="http://about.unimelb.edu.au/careers/working/benefits">http://about.unimelb.edu.au/careers/working/benefits</a>
<b>HOW TO APPLY</b>	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , under 'Job Search and Job Alerts', select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
<b>CONTACT FOR ENQUIRIES ONLY</b>	Chris Ryan Tel +61 3 9288 3572 Email <a href="mailto:ryancd@unimelb.edu.au">ryancd@unimelb.edu.au</a> <i>Please do not send your application to this contact</i>

For information about working for the University of Melbourne, visit our website:  
[about.unimelb.edu.au/careers](http://about.unimelb.edu.au/careers)

## ***Position Summary***

Join the Centre for Research Excellence in Diabetic Retinopathy and write software that will have a direct impact on eye care in regional and Indigenous communities. This is a unique opportunity for a graduate with an interest in science and information systems to gain hands-on experience in the emerging field of e-health software development. Working alongside an experienced software developer and health informatician, you'll gain exposure to industry standards, practices and full stack development while working in the latest web frameworks with a focus on user-experience.

### ***1. Key Responsibilities***

- ▶ Design and development of application modules contributing to the image-based, eye health web platform.
- ▶ Provide training and application support to end users.

#### **1.1 APPLICATION MODULE DESIGN AND DEVELOPMENT**

- ▶ Design database schema and API endpoints, consulting with eHealth interoperability standards (DICOM, FHIR, HL7).
- ▶ Code, test and debug modules in JavaScript (ES6 & NodeJS), HTML5 and CSS3.

#### **1.2 TRAINING AND APPLICATION SUPPORT**

- ▶ Production of instructional written manuals and screenshot videos on application use.

## ***2. Selection Criteria***

### **2.1 ESSENTIAL**

- ▶ Tertiary qualification in a science or technology-based discipline, preferably with a component of algorithms or programming, or completion of a diploma level qualification with relevant work-related experience.
- ▶ Working knowledge of at least one of the following languages: JavaScript, Python, C++, Ruby.
- ▶ The ability to work and learn independently.
- ▶ Proven organisation and time management skills.
- ▶ Proficiency in the use of software modelling tools such as UML.
- ▶ Strong attention to detail including ability to adhere to documentation and version control.

### **2.2 DESIRABLE**

- ▶ Knowledge of JavaScript libraries and frameworks such as Angular, Aurelia, ReactJS.
- ▶ Experience designing or developing for the web using responsive design.

- ▶ Knowledge of dynamic style sheet languages (LESS, Sass).
- ▶ Experience implementing a production web application environment.
- ▶ Knowledge of a variety of database technologies (relational, noSQL, flat-file).
- ▶ Interest in open-source technology.

### ***3. Job Complexity, Skills, Knowledge***

#### **3.1 LEVEL OF SUPERVISION / INDEPENDENCE**

The incumbent will work under routine supervision to general direction depending upon experience and the complexity of the tasks.

The incumbent may supervise or co-ordinate others to achieve objectives.

#### **3.2 PROBLEM SOLVING AND JUDGEMENT**

The incumbent is expected to apply standard technical training, techniques and principles in computer science to solve problems.

#### **3.3 PROFESSIONAL AND ORGANISATIONAL KNOWLEDGE**

The incumbent is expected to perform tasks/assignments which require broad technical knowledge and experience in computer science including knowledge of data structures and algorithms.

Theoretical knowledge in computer science gained at degree level should be applied in a straightforward way in execution of the position's key responsibilities.

The incumbent is expected to perform tasks/assignments which require proficiency in the research group's procedures, systems, processes and techniques and how they interact with other related functions, in order to assist in their adaptation to achieve objectives and advise, assist and influence others.

### ***4. Equal Opportunity, Diversity and Inclusion***

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and

background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Growing Esteem.

## **5. Occupational Health and Safety (OHS)**

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<http://safety.unimelb.edu.au/topics/responsibilities/>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

## **6. Other Information**

### **6.1 DEPARTMENT OF MEDICINE, ST VINCENT'S HOSPITAL**

[www.medicine.unimelb.edu.au/medicine-and-radiology](http://www.medicine.unimelb.edu.au/medicine-and-radiology)

The Department of Medicine and Radiology is a large and diverse department in the Melbourne Medical School that undertakes research, postgraduate and undergraduate teaching within the University of Melbourne teaching hospitals. The Department of Medicine, St Vincent's Hospital is a large, research-active node of the Department. Research at the Department of Medicine, SVH encompasses basic, clinical and applied research in a range of areas. The ultimate goal of our research is to improve the treatment of human disease. Driven by clinical questions, our work covers aspects of the basic mechanisms of biology and physiology, clinical and community-based epidemiology, and clinical trials for new therapies and devices. We have outstanding academic and professional staff, highly proficient in a diverse range of clinical, research, teaching and administrative skills.

### **6.2 MELBOURNE MEDICAL SCHOOL**

[www.medicine.unimelb.edu.au](http://www.medicine.unimelb.edu.au)

The Melbourne Medical School (MMS) was established in 1862 and has a substantial international reputation for its leadership in teaching and training, health research, policy and practice. The MMS is committed to working with the communities we serve to improve health and advance health care. We will do this through our teaching, learning, research, clinical care and advocacy.

The MMS is composed of eight clinical departments (General Practice, Medical Education, Medicine and Radiology, Obstetrics and Gynaecology, Paediatrics, Psychiatry,

Rural Health and Surgery) which are embedded within clinical health services throughout metropolitan Melbourne and rural Victoria.

The MMS delivers a suite of health related graduate programs including the Doctor of Medicine (MD), the first professional entry Masters level medical program in Australia. The Melbourne MD delivers a fresh approach to medical training and creates a new benchmark in 21st century medical education.

The MMS is committed to improving the wellbeing of the community through the discovery and application of new knowledge. The research effort of the school is highly collaborative and spans basic to translational research and involves over 800 graduate researchers and 1000 academic staff.

The MMS also actively participates in the public debate and advocacy around key health issues and policy based on our values of commitment, integrity, compassion, respect and service.

### 6.3 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

[www.mdhs.unimelb.edu.au](http://www.mdhs.unimelb.edu.au)

The Faculty of Medicine, Dentistry & Health Sciences has an enviable research record and is the University of Melbourne's largest faculty in terms of management of financial resources, employment of academic and professional staff, teaching of undergraduate and postgraduate (including research higher degree) students and the conduct of basic and applied research. The Faculty's annual revenue is \$628m with approximately 55% of this income related to research activities.

The Faculty has a student teaching load in excess of 8,500 equivalent full-time students including more than 1,300 research higher degree students. The Faculty has approximately 2,195 staff comprising 642 professional staff and 1,553 research and teaching staff.

The Faculty has appointed Australia's first Associate Dean (Indigenous Development) to lead the development and implementation of the Faculty's Reconciliation Action Plan (RAP), which will be aligned with the broader University – wide plan. To enable the Faculty to improve its Indigenous expertise knowledge base, the Faculty's RAP will address Indigenous employment, Indigenous student recruitment and retention, Indigenous cultural recognition and building partnerships with the Indigenous community as key areas of development.

### 6.4 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at <http://about.unimelb.edu.au/careers>.

## 6.5 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. <http://about.unimelb.edu.au/strategy-and-leadership>

The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs.

<http://research.unimelb.edu.au/our-research/research-at-melbourne>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

- ▶ Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.
- ▶ Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.
- ▶ Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

## 6.6 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at <http://www.unimelb.edu.au/governance>