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## FULL STACK ENGINEER – AI

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**JUNE 2026**

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### POSITION SUMMARY

Location:	Hybrid work – remote and Parkville office		
Functional area:	Orygen Digital		
Classification/ Salary:	\$160,000 - \$180,000 p.a. commensurate with skills and experience + 12% super + access to \$15,900 and \$2,650 NFP salary packaging		
Job level:	4		
Reports to:	Engineering Manager		
Employment type:	Full-time (1.0FTE)		
Employment length:	Ongoing		
Direct reports	0	Indirect reports	No

### POSITION PURPOSE STATEMENT

The Full Stack (FS) AI Engineer is a core member of Orygen Digital, working across existing and new products to embed AI capabilities where they can meaningfully improve outcomes for young people and the professionals who support them. This role combines product-focused software craftsmanship with hands-on AI integration expertise, building the end-to-end systems through which AI capabilities are designed, embedded, and experienced: from frontend interfaces and backend services through to the models, pipelines, and APIs that power them.

The FS AI Engineer takes ownership of the full delivery surface: the product features young people and clinicians interact with, and the AI layer underneath them. This includes integrating and operationalising AI capabilities such as large language models, semantic search, and data-driven personalisation. They apply sound design principles, automated testing, and modern delivery practices to ship features that are coherent, reliable, and safe end to end.

The FS AI Engineer works as a genuine partner to product, design, research, clinical, and data colleagues, taking ownership of outcomes rather than tasks, and bringing the same care to reliability, security, accessibility, and observability as to the features themselves. The ultimate measure of the work is not a deployment pipeline going green. It is about our digital products being available, secure, and fit for purpose for young people and the professionals walking alongside them.

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### REVOLUTION IN MIND

Beyond squad delivery, the FS AI Engineer is an active member of the Engineering Chapter, contributing to the shared standards, practices, and technical direction that raise the capability of the whole engineering organisation.

**About Orygen Digital**

Orygen Digital, the digital mental health division of Orygen, develops, evaluates, and disseminates engaging and evidence-based interventions, such as MOST and Mello, that integrate with current national and international service delivery models for young people and their families.

**POSITION FOCUS**

	<b>Key responsibility area</b>	<b>Percentage</b>
1	Full Stack Engineer - AI	65%
2	Engineering Chapter Member	25%
3	Other	10%

**POSITION KEY RESPONSIBILITY AREAS**

**1. Full Stack Engineer - AI**

**Core Responsibilities**

- Work as an active, contributing member of a cross-functional squad delivering technology that reaches young people navigating mental health challenges, and the professionals supporting them.
- Develop features, services, and architectures that are modular, maintainable, and reusable, building on a codebase you will be proud to hand to the next engineer.
- Handle sensitive clinical and personal data with care, ensuring systems and processes comply with accreditation standards, healthcare regulations, privacy obligations, and updating implementations as requirements evolve.
- Participate in compensated on-call rotation, performing triage and incident response to ensure timely resolution and system stability.
- Effectively prioritise individual efforts and proactively communicate blockers or delays to keep delivery on track and within scope and budget.
- Ensure work is scoped accurately against the initial brief; document and communicate any changes to scope with transparency.

**AI Integration**

- Design and implement integrations with AI services, including AWS-native capabilities, translating research and product intent into production-ready features.
- Build and maintain the data pipelines, preprocessing logic, and API layers that connect product surfaces to AI capabilities, ensuring inputs and outputs are well-validated, observable, and fit for a clinical context.
- Work closely with a multidisciplinary team to operationalise AI features, taking models and approaches from prototype to reliable, maintainable production components.
- Implement evaluation and monitoring instrumentation for AI features in production, identifying unexpected outputs or safety-relevant edge cases and raising them through appropriate channels.
- Apply responsible AI principles as a baseline engineering practice, including attention to privacy, output safety, and the particular obligations that arise when AI is embedded in products used by young people.

**Backend Development**

- Design and develop scalable, maintainable backend services and APIs that support robust data flow, system integration, and the reliable delivery of AI-powered features to end users.
- Design and optimise database schemas, queries, and data models across relational stores (MariaDB, PostgreSQL) and, where appropriate, caching, messaging (Redis, SQS/SNS, EventBridge), and vector storage layers to support AI-powered workloads.
- Apply secure coding practices, including appropriate handling of credentials, access controls, and sensitive data.

### Platform and Delivery

- Own containerisation across the full lifecycle, from writing and optimising Docker files through to production container orchestration and deployment pipelines.
- Maintain and expand CI/CD pipelines across Bitbucket and AWS, ensuring every release reaching young people and clinicians is reliable, tested, and traceable.
- Add and maintain observability instrumentation, including logs and metrics, across services owned, and proactively identify and remediate gaps in observability across the broader codebase to uplift standards and support incident response.

### Frontend Development

- Own full-stack feature development end-to-end, including frontend implementation.
- Work alongside UX/UI designers to develop user interfaces that are intuitive, responsive, and accessible across multiple device types, recognising that the people using our products are often navigating difficult moments in their lives.
- Collaborate with frontend engineers on component architecture and UI requirements to ensure backend design supports effective, performant user experiences.

### 2. Engineering Chapter Member

- Participate actively in the Engineering Chapter, contributing to shared standards, practices, and the collective capability of the engineering team.
- Contribute to Architecture Decision Records (ADRs) and the Architecture and Engineering forum, helping shape technical direction across the organisation.
- Support developer experience improvements, including tooling, local development environments, and shared workflows that make the team more effective.
- Engage in systemic technical debt repayment initiatives, working across squad boundaries where needed to address root causes rather than symptoms.
- Contribute to and participate in engineering training and knowledge sharing, both as a learner and as someone who brings experience and perspective to the team.
- Collaborate on release management practices and standards, ensuring consistency and reliability across the engineering organisation.

### 3. Other

- Take ownership of individual and professional growth, engaging with the development opportunities and investment Orygen Digital provides, and demonstrating measurable progress over time.
- Participate in other development activities and responsibilities as directed by the Head of Engineering and other senior managers within the Orygen Digital team.
- Promote, encourage and adhere to all workplace policies to support a safe and inclusive work environment.
- The responsibilities included in this position description may vary from time to time due to changes in business needs.

## EDUCATION / QUALIFICATIONS

Essential	<ul style="list-style-type: none"> <li>• Bachelor's degree in Computer Science, Engineering, or a related field.</li> </ul>
Desirable	<ul style="list-style-type: none"> <li>• Relevant certifications (e.g., AWS Certified Developer or Solutions Architect) are a plus.</li> </ul>

## EXPERIENCE / SKILLS

<p>Experience / skills</p>	<p><b>AI Integration</b></p> <ul style="list-style-type: none"> <li>• Demonstrable experience integrating AI or machine learning services into production products.</li> <li>• Practical understanding of how AI capabilities, such as language models and data-driven personalization, are operationalised within product backends.</li> <li>• Familiarity with vector storage or embedding-based retrieval as part of an AI feature stack is advantageous.</li> <li>• Understanding of responsible AI principles in practice, including privacy-preserving data handling, output safety considerations, and the particular care required when AI is embedded in products used by vulnerable populations.</li> <li>• Experience contributing to evaluation or monitoring of AI features in production, including identifying unexpected or degraded outputs, is advantageous.</li> </ul> <p><b>Backend</b></p> <ul style="list-style-type: none"> <li>• Demonstrable production-grade backend development experience building scalable, maintainable, and performant server-side applications.</li> <li>• Strong command of Python, with emphasis on clean architecture and standards-compliant code, ideally including Symfony/Doctrine and FastAPI.</li> <li>• Experience implementing authentication, authorisation, and data validation patterns that protect system integrity and user privacy.</li> </ul> <p><b>Platform and Delivery</b></p> <ul style="list-style-type: none"> <li>• Confident working with CI/CD pipelines, containerisation (Docker), and cloud-native services, with practical AWS experience preferred.</li> <li>• Familiarity with observability practices including logging, metrics, and incident response.</li> </ul> <p><b>Frontend</b></p> <ul style="list-style-type: none"> <li>• Solid frontend capability to own full-stack feature delivery without requiring frontend support.</li> <li>• Understanding of Capacitor or equivalent frameworks for compiling web applications to native Android and iOS is advantageous.</li> </ul> <p><b>Communication and Design</b></p> <ul style="list-style-type: none"> <li>• Ability to present system design proposals and articulate technical trade-offs clearly to both engineering and non-engineering stakeholders.</li> <li>• Capability to conduct technical spikes and experiments, translating findings into actionable decisions the team can act on.</li> </ul> <p><b>Desirable</b></p> <ul style="list-style-type: none"> <li>• Experience building search, recommender or data-driven personalisation systems.</li> <li>• Exposure to prompt engineering or structured prompting patterns at a systems level.</li> <li>• Experience working in a health, clinical, or regulated product environment.</li> </ul>
<p>Personal attributes</p>	<ul style="list-style-type: none"> <li>• Brings genuine care to the work, understanding that the systems built here are used by young people at some of the most difficult moments of their lives.</li> <li>• Translates ambiguous problems into clear, well-reasoned solutions, comfortable making autonomous decisions and standing behind them.</li> <li>• Strong systems thinker, able to understand complex interdependencies and anticipate downstream impacts before they become incidents.</li> <li>• Communicates with clarity and honesty, written and verbal, with colleagues, stakeholders, and the broader engineering community.</li> <li>• Curious and self-directed, staying current with emerging technologies and bringing relevant ideas back to the team.</li> <li>• Thrives in a dynamic environment where priorities shift, requirements evolve, and good judgement matters more than a perfect brief.</li> </ul>

	<ul style="list-style-type: none"> <li>Invested in the growth of the people around them as much as their own, fostering a culture where quality, craft, and shared success are the norm.</li> </ul>
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### KEY RELATIONSHIPS

Internal	<ul style="list-style-type: none"> <li>Orygen Digital Value Streams and Squads</li> </ul>
External	<ul style="list-style-type: none"> <li>Consultants, contractors</li> </ul>

### SPECIAL REQUIREMENTS

<ul style="list-style-type: none"> <li>Unrestricted right to live and work in Australia.</li> <li>A current National Police Check will be required.</li> <li>Any offer of employment is conditional upon receipt and maintenance of a satisfactory Working with Children Check.</li> <li>In line with government guidelines, this position may need to be based at home during certain periods. As such a reliable internet connection will be required.</li> <li>Occasional out of hours, evening and/or weekend work may be required.</li> </ul>
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### SAFETY, HEALTH AND WELLBEING RESPONSIBILITIES

<p>Employees are required to comply with all workplace health, safety and wellbeing policies and procedures of Orygen.</p> <p>In addition, employees are expected to:</p> <ul style="list-style-type: none"> <li>Promote and demonstrate Orygen’s high standards in relation to health, safety and wellbeing, championing a culture of safety in the workplace.</li> <li>Take responsibility for their own safety, health and wellbeing and for their colleagues and others they work alongside, as far as they are able.</li> <li>Follow policies, training and guidelines related to Workplace health, safety and wellbeing, including reporting of unsafe work practices, incidents, hazards and near miss events.</li> <li>Be committed to promoting and protecting the safety and well-being of all children and young people and embedding safeguarding practices into all our programs and services.</li> <li>You may encounter sensitive information related to mental health as part of your work. Being aware of this and how it could affect you and planning accordingly is essential.</li> </ul>
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### ACKNOWLEDGEMENT

Confirming this position description has been read and understood by:

Name	[insert name]
Signature	[insert signature]
Date	[insert date]