Mr James Francis Navin
ACT
Australia

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Summary

I am highly motivated with a strong academic record and a number of years experience working in complex and demanding environments developing production-grade software applications. I have a passion for using good software practice to develop high-quality software, and I am constantly seeking ways to improve my knowledge and expertise.

I have experience in a wide range of software development languages, tools and technologies. I am highly proficient in Java/JEE and related technologies. My professional experience has included server-side, web, desktop and mobile development, including development of 3D visualisation tools for complex scientific data.

My work at Geoscience Australia has given me a thorough understanding of the challenges involved in data visualisation, and in dealing with spatial information. It has exposed me to a range of spatial data standards and tools, and given me a high level understanding of a range of geoscience disciplines.

Outside of work I am passionate about rock climbing, mountain biking, Hapkido and skiing. I also enjoy traveling and experiencing new places and cultures.

Employment History

3D Application Developer

Geoscience Australia (Canberra, ACT, Australia)
August 2010–Present

I have been working as a 3D Application Developer in the Visualisation and Science Promotion team at Geoscience Australia, Australia's national geoscience agency.

My primary responsibilities have been the development of a suite of tools utilising the NASA World Wind SDK to visualise geoscience data in a virtual globe context. These tools allow for disparate datasets from a range of geoscience and spatial disciplines to be visualised together. The tools provide features that allow creation of self-contained data bundles that can be viewed offline, as well as allowing for the production of key-frame animations that can be used in video productions.

Additionally, I have developed a number of bespoke solutions for the visualisation of specific datasets, including landslide model outputs and a national-scale building risk exposure dataset.

Tools/Technologies used: Java, Python, NASA World Wind SDK, JOGL/OpenGL, Swing, Eclipse SDK/SWT, Eclipse IDE, SVN, GIT, JIRA, Maven, Ant, XML

Responsibilities:
- Development of the GA World Wind Suite (https://github.com/ga-m3dv/ga-worldwind-suite)
- Development of the EarthSci platform (https://github.com/ga-m3dv/ga-earthsci-rcp)
- Data visualisation support for Geoscience Australia
- Digital appendix for the "Shaping a Nation: A Geology of Australia" publication

Team Leader (acting)

Geoscience Australia (Canberra, ACT, Australia)
October 2011–February 2012

I undertook acting team leader duties for the Visualisation and Science Promotion team at Geoscience Australia.

My duties included day-to-day management of a team of five visualisation, media production and software development staff, as well as stakeholder engagement and project management.

Responsibilities:
- Day-to-day management of visualisation, media production and software development staff
- Stakeholder engagement
- Visualisation and media production project management

Director

Idea Logica (Canberra, ACT, Australia)
July 2009–Present

I am co-founder of Idea Logica, a small company specialising in the development of applications for web and smartphone platforms.

My involvement in the company has included general management and administration duties, as well as the development of a number of web and smartphone applications. This includes a secure note-taking application for the JavaME platform; the 'iPolitician' iOS application; and a web application for the ACT Safety House association that has greatly reduced the management overheads incurred by the community-based organisation.

I have also been involved in the development of a number of unreleased protoype applications developed for the Android and iOS platforms.

Tools/Technologies used: Android SDK, Objective-C/iOS, Appcelerator Titanium, JavaME, LWUIT, Maven, Eclipse IDE, SVN, BouncyCastle Lightweight Crypto API, Apache Forrest, XML, XSLT.

Responsibilities:
- Development of 'Notably' secure note taking application for JavaME
- Development of the 'iPolitician' application
- Development of the ACT Safetyhouse web application
- Development of a number of iOS and Android application prototypes

Analyst Programmer

CSC Australia (Canberra, ACT, Australia)
February 2007–August 2010

While with CSC I was primarily engaged at Centrelink, Australia's federal social security agency.

Whilst there I worked on the development and release of a number of customer- and staff-facing JSR168 portlet applications that adhere to Centrelink's internal architectural guidelines and standards. My work on these projects saw me become proficient in a number of industry-standard tools and technologies such as Java/JEE development, JSP and HTML/Javascript authoring, the Spring framework (including Spring Webflow), the Maven build management system, the ClearCase version control system, and IBM WebSphere Portal Server.

In addition to this, I was technical lead on a project at Centrelink implementing a framework for authoring re-usable question sets that can be combined in multiple applications. This framework significantly reduced the time required to develop new customer-facing portlet applications.

Tools/Technologies used: Java/JEE, JSR168 Portlets, JSP, Javascript, Eclipse IDE, IBM Websphere Portal, Maven, Spring Framework (including Webflow), JUnit, Log4J, Selenium, IBM ClearCase, CVS.

Responsibilities:
- Development of customer- and staff-facing JSR168 portlet applications for Centrelink
- Design and development of the in-house CIC framework for Centrelink Online Services
- Production of a developer's guide for developing JSR168 portlet applications in accordance with Centrelink's internal system architectures

Education and Training

Web Accessibility and WCAG 2.0 workshop, May 2013
Access IQ

GeoEssentials, 2011
Geoscience Australia

Rich Web Applications with Spring, November 2009
SpringSource Training

IBM WebSphere Portal V6.0 Application Development, 2008
IBM Lotus Education

Bachelor of Software Engineering (Hons 1st class), 2003–2006
Australian National University

Awards

- **Peer Award**
  Geoscience Australia, 2012
  For work on the "Shaping a Nation: A Geology of Australia" publication

- **CEO's Award**
  Geoscience Australia, 2012
  For work on the "Shaping a Nation: A Geology of Australia" publication

- **Chancellor's Commendation**
  Australian National University, 2004
  For outstanding academic performance

- **Chancellor's Commendation**
  Australian National University, 2003
  For outstanding academic performance

Professional memberships

Association for Computing Machinery (ACM)
2011–Present

Publications & Presentations

- James Navin; "Displaying complex hydrogeological and hydrogeophysical data using an interactive 3D virtual globe viewer based on World Wind Java"; *34th International Geological Congress [Conference presentation]*; August 2012.
- James Navin, Michael de Hoog; "Presenting geoscience using virtual globes"; *AUSGeo News 104*; `http://www.ga.gov.au/ausgeonews/ausgeonews201112/virtual.jsp`; December 2011.
- James Navin, Tony Pack; "Using a virtual globe to present disparate national geoscience data"; *7th International Symposium on Digital Earth [Conference presentation]*; August 2011.

Skills

Level	Description
1	Trained and familiar with but little experience.
2	Sound knowledge and understanding. May require more research to use less common features.
3	Strong knowledge and understanding. Several years of experience.
4	In depth knowledge and a high level of proficiency. Able to provide technical expertise.
5	An industry leading authority on the subject. Able to train others at an advanced level.

Programming Languages and Frameworks
- [4] Java
- [3] JEE
- [3] Swing
- [3] Eclipse RCP/SWT
- [3] Spring Framework
- [3] Apache Tiles
- [2] Apache Forrest
- [3] JSP/JSTL
- [4] HTML/CSS
- [3] JavaScript
- [3] jQuery
- [3] XML (Including DTD, XSD)
- [2] XSLT/XSL-FO
- [3] Hibernate/JPA
- [2] SQL
- [3] Python
- [2] C/C++
- [3] OpenGL/JOGL
- [4] NASA World Wind SDK

Mobile
- [2] Objective-C/iOS
- [2] Android SDK

- [2] JavaME
- [2] Appcelerator Titanium

Web Servers
- [2] JBoss Application Server
- [2] Apache Web Server
- [2] Apache Tomcat
- [2] IBM WebSphere Application Server
- [2] IBM WebSphere Portal Server

Development Environments and Tools
- [4] Eclipse IDE
- [2] Subversion (SVN)
- [3] GIT
- [2] CVS
- [2] IBM ClearCase
- [3] Apache Ant
- [4] Apache Maven

Spatial and GIS
- [2] ArcGIS
- [3] GDAL
- [2] OGC CSW/WMS/WFS
- [3] Spatial data processing

Academic transcripts and referee reports available on request