# Luke Cooper

Brisbane, Australia luke.cooper@gmail.com 0423 083 676

## Objective

I am a software developer with over 15 years of diverse industry experience looking for new programming challenges. I offer experience in C#, Java, TypeScript/JavaScript and other technologies on a mixture of client, web and embedded platforms. I also have a keen interest in learning languages and platforms, and seek to extend my experience into new areas.

# Technical Knowledge

Languages	C#, Java, TypeScript/JavaScript, Clojure, C++, C, SQL, Ruby, Python.
Frameworks/ APIs	Node.js, AngularJS, jQuery, Unity, Microsoft .Net, Ring/Compojure, Java SE, Java EE, Spring, jQuery, Nintendo RVL SDK, Microsoft X360 XDK, SCEE SDK.
Platforms	Linux, Windows, Amazon Web Services, Sony PlayStation 2/3, Nintendo GameCube/Wii, Microsoft Xbox/Xbox 360.

# Professional Experience

2015–2018 | Bondi Labs Programmer/Lead Programmer

Led a small team of programmers in developing the Kuube 3D Simulation Training platform used by major international companies for training employees in Workplace Health and Safety and Biosecurity Inspection. Developed the 3D Unity application for PC, iOS and WebGL and was the primary full-stack developer for the learning management web app deployed to Amazon Web Services.

Was the sole developer responsible for implementing a 3D Virtual Refractor for the Brien Holden Vision Institute used to augment the training of optometry students both in Australia and internationally. Built both the Unity simulation and the Clojure-based supporting learning management web application.

Was responsible for architecting and maintaining build systems, development and deployment tools, and the cloud-based infrastructure backing for Bondi Labs' web applications, websites and other company services.

#### 2011–2014 | Flight Centre Software Services Senior Developer

Enhanced and supported a suite of corporate travel booking applications built in a mixture of enterprise Java technologies, which service over 2,500 companies throughout Australasia.

Enhanced security and stability of legacy Java web applications with custom Python scripts to discover SQL injection and cross site scripting vulnerabilities.

Created a Spring/Hibernate Java web application for corporate chartered travel booking. Worked end to end on the application from schema design to jQuery/JSP front end.

#### 2005–2011 THQ Studio Australia Senior Programmer

Worked as part of a small team that developed a number of console games based on major licenses which sold millions of copies internationally. Credited contributions on five published titles on the Sony PlayStation 2 and 3, Microsoft Xbox and Xbox 360, and the Nintendo GameCube and Wii.

Designed and implemented a wide variety of game systems including cameras, save/load, profiles, user interface, character movement, navigation, front end, sound, editor and a number of complete mini games.

Worked closely with in house clients to ensure that the delivered systems met with the stringent expectations required for publishing a successful title.

Developed in C++ using proprietary and off the shelf libraries, with some PC tools implemented using the .NET framework.

#### 2003–2005 | Oracle Corporation Applications Engineer

Made critical repairs to a troubled offline sales application originally developed in Java and VB6. The primary focus of the work was ensuring that the Excel-based application synchronised in a secure and reliable manner with the Oracle Applications database.

Made enhancements and provided technical customer support for a J2EE application that provided a desktop interface using Microsoft Excel to allow for mass data entry into Oracle Applications database tables.

### Education

2015 | Bachelor of Applied Science QUT

Ecology Major, Environmental Science Second Major, Graduated with Honours

2002 Bachelor of Information Technology (Honours) QUT

Graduated with First Class Honours, Awarded University Medal.

2001 | Bachelor of Information Technology QUT

Software Engineering Major, Graduated with Honours.

### **Publications**

Brown, R., Pham, B., and Cooper, L. (2003). Visual attention-based polygon level of detail management. *GRAPHITE*, pages 55–62

Investigated a novel approach of using the theory of human visual attention to optimise polygon level of detail management in real-time 3D simulations.

#### Interests

Cycling, the environment and the natural world, functional programming, learning.

### References

Bondi Labs | Dave MacMinn Former Studio Director

dmacminn@hotmail.com

 $0406\ 522\ 652$ 

Flight Centre | Scott Laporte Former Team Leader

scott.laporte@gmail.com

 $0421\ 128\ 197$