

PHILLIP COOPER - CURRICULUM VITAE

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Australian resident and passport holder (NAT: 'AUSTRALIAN CITIZEN')
UK passport holder (NAT: 'BRITISH CITIZEN')



PROFILE

Experienced software developer with strong background in enterprise security, mobile app development, and cloud products across an expansive portfolio.

My unique set of skills have allowed me to contribute to many projects, ranging from security compliance (NSA STIG, GDPR, PII), full stack cloud applications, network security, accessibility, and internationalisation (i18n).

I have extensive exposure to the full software development life cycle. In particular Agile development, having served in a Scrum master role, team lead, and principal engineer.

TECHNICAL SKILLS SUMMARY

SKILL	LEVEL	YEARS
Agile Development & Scrum	Expert	8
Mobile Development (Apple iOS, Android, Objective-C, Swift, Flutter)	Expert	12
PKI & Network Security (OCSP, USA NSA-STIG, SSL/TLS, AES, OAuth, OIDC)	Expert	8
Continuous Integration (Jenkins, RTC, Buildforge, BuddyBuild, AppCenter, Bitrise)	Expert	14
PM & Collab (RTC, Jira, Confluence, Trello, GitHub, ZenHub, Azure DevOps)	Expert	8
Cloud (AWS, Azure, Terraform)	Expert	11
C/C++ (GCC/CLANG, GDB/DDD, POSIX, OpenGL/DX/UI, Boost, Threading)	Good	12
Java (JEE, JSP, JSF, SWING/AWT/SWT, JMS, JDBC, JUnit, Mockito)	Good	12
JavaScript/TypeScript (NodeJS, JSON)	Good	15
C# .NET (Xamarin/Mono, XNA, MonoGame)	Good	5
Installation Development (InstallShield / IS Script, RPM, AIX installp)	Good	6
AI / ML / CV (CoreML, MLKit, MediaPipe)	Good	8
Databases (SQL, MS T-SQL, SQLite, MySQL, Postgres)	Proficient	6
Web Development (HTML5, CSS3, RESTful APIs)	Proficient	15

EDUCATION AND QUALIFICATIONS

Bachelor of Computer Science (games technology) [honours], Charles Sturt University

Tertiary 2005-2009: Charles Sturt University, Bathurst NSW

Key Achievements:

- Dean's award for Academic Excellence.
- Admission into Golden Key Honours society.

High School 1999-2004:

Key Achievements:

- Completed NSW Higher School Certificate.
- Received many awards and merits; notably the Reuben F. Scarf award and the University of Newcastle award for excellence in Technology.

EMPLOYMENT HISTORY

August 2016 - Current

Principal Engineer (iOS, Cloud, Overall Architecture)

Advanced Health Intelligence

Role Description:

- Implement and manage SDKs that the company provides as our core business.
- Propose implementation approaches and core architecture.
- Work with and support the development team, including review of peer code with respect to our code style and development guidelines.
- Scrum master to help manage our ticket board so that development is efficient and on-track with scope and planning. Help others with using git SCM.
- Participate in partner integration meetings, proof of concepts, and support (L3).
- Manage the continuous integration and testing pipeline to make sure that released software is to the highest standard of quality.

Key Skills/Technologies:

iOS App development (CoreMotion, CoreML, AVFramework, PureLayout, InterfaCSS, Kiwi, Jazzy), AWS Cloud (Cognito, S3, Lambda, Serverless, APIGW, CloudFront, DynamoDB, Aurora, Kinesis, SNS, IAM, Boto3). Terraform. Azure. Databricks.

July 2015 - June 2016

iOS Software Engineer

IBM

Role Description:

- One of two developers for **MaaS360 Secure Browser** app. An app that simplifies corporate deployment of Intranet access and provision policy for employee BYOD benefit. [\[https://www.ibm.com/products/maas360\]](https://www.ibm.com/products/maas360)
- Fixed defects and worked directly with customers to solve issues.
- Implement multiple security defence mechanisms beyond Apple SDK capabilities, such as user data and Browser Cache encryption.

Key Skills/Technologies:

Objective-C (iOS), UIView, NSURL*, Encrypted Core Data (SQLite backing DB), XCode, PKI, Trello, Jira, SVN, GIT.

January 2015 – July 2015

Team Lead, Software Engineer

IBM

Role Description:

- Development team lead and scrum master role for unannounced security product.
- PaaS based cloud offering security product.

Key Projects:

- **IBM Security Network Protection (XGS).**
- **IBM QRadar** [<https://www.ibm.com/products/qradar-siem>].

Key Skills/Technologies:

JavaScript, Angular.JS, Java EE, JUnit, Mockito, ElasticSearch DB, HTML5/CSS3, Ionic, Test Driven Development (TDD), Behaviour Driven Development (BDD).

2012 – December 2014

Software Engineer

IBM

Role Description:

- Refactor existing product to be compliant with accessibility policy.
- Refactor existing product to be localised and translated for a global audience.
- Ensure product meets US Government NSA STIG security compliance.
- Develop: Implement data integrity monitoring and alert sensors.
- System (Unix/AIX/Linux/Solaris) Security, Intrusion Prevention product development (IPS).
- Develop: Security (System Audit) monitoring.
- Develop: Data integrity and activity monitoring.
- QA: New product features from customer perspective.
- QA: New features do not cause issues with existing features (regression testing).
- QA: Report discovered issues (defects) with great detail to benefit developers.

Key Projects:

- **IBM Security SiteProtector** (<https://www.ibm.com/docs/en/sss/3.1.1?topic=siteprotector-overview>).
- **IBM Security Host Protection** for Linux/AIX/Unix.

Key Skills/Technologies:

Java (JEE, SWING/SWT/AWT), MSSQL (T-SQL), C++14 (VC++, MS Visual Studio), HMAC data integrity, InstallShield (IS Script), Python, C++ (gcc, gdb, llvm, ddd, posix), Shell scripting (SH, BASH), Package management (RPM, AIX installp).

2007 – 2008

**Research Software Engineer
Charles Sturt University**

Role Description:

- On hand research developer for Psycholinguistics Laboratory.
- Research developer for the Centre for Research in Complex Systems (CRiCS).

Key Projects:

- Wealth Management Advisor / Client relationship simulator.

OTHER ACHIEVEMENTS

Search Engine - 2004

Attendee of Sydney University's Compuware Computer Science summer school, where a team of nine fellow attendees set out to create a complete web search engine using various technologies. The search engine was accomplished within one week and donated to CanTeen (<http://www.canteen.org.au>) youth cancer support charity organisation.

Educational Game - 2007

For a group assignment at university, my class developed an educational game to simulate how government policies affect the environment and economy. My contributions to the project include the environment simulation model with realistic science-based weather and water distribution patterns. In addition to the environment simulator, I helped with the sound engine and the logging mechanism.

Xbox 360 Video Game - 2009

During my gap year after university, I developed a Xbox 360 video game for entry into the Microsoft Dream.Build.Play competition. The game, titled "Biophage", incorporates many innovations that I developed for this game, primary of which include:

- Scalable game engine where the engine can dynamically scale the threading pipeline to improve concurrent processing capability to approximately linear performance increase.
- Massive real-time online game play capability. Experimentation showed that the game could achieve 3D spatial movement with VoIP for 100 clients, requiring only 8kbps connection speed to the server for smooth game play experience.

More information about my submission can be found on my website (<http://bit.ly/1cU2kmJ>).

HOBBIES AND INTERESTS

When taking a break from work, I enjoy many activities. Golf is my favourite pastime from first playing at age 13, but I have since started getting into Beach Volleyball whilst I lived close to the magnificent Gold Coast beaches. I try to keep physically active as much as I can to balance out my office desk job.

Volunteer Work

From an early age, I have been engaged in volunteer work and charity/community events quite regularly. Charities that I have worked with include Diabetes Australia, Cancer Council Australia, Returned & Services League, and Lions Club.

I have been an active member of my local Rotary Club (Maylands Rotary), and at times served as President, and Secretary.