# **PHILLIP COOPER**

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## PROFILE



Experienced software developer with a strong background in enterprise security, 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 Scrum Master, Team Lead, Principal Engineer, and CTO roles.

# **TECHNICAL SKILLS SUMMARY**

SKILL	LEVEL	YEARS
Agile/Scrum & Project Management (RTC, Jira, GitHub, Azure DevOps)	Expert	8
Mobile Development (Apple iOS, Android, Objective-C, Swift, Flutter)	Expert	12
PKI & Network Security (OCSP, SA-STIG, SSL/TLS, AES, OAuth, OIDC)	Expert	8
Continuous Integration (Jenkins, Bitrise, Jira Pipeline, Code Cov, GitHub Actions)	Expert	14
Dev Ops (Ansible, NixOS, Docker Compose, Terraform, Office 365 Admin Center)	Expert	8
Cloud (AWS, Azure, PocketBase, Supabase)	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, Bun, Web Assembly, )	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, Ollama, OpenUI, DeepSeek)	Good	8
Databases (SQL, MS T-SQL, SQLite, MySQL, MariaDB, Postgres)	Proficient	6
Web Development (HTML5, CSS3, RESTful APIs, React)	Proficient	15

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# **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**

#### Advanced Health Intelligence CTO (since 2024, previously Principal Engineer)

#### August 2016 - Current

Role Description:

- Provide key guidance and decision making for the company, both strategic and tactical directions.
- Propose approaches to implementation and core architecture.
- Implement and manage SDKs that the company provides as its core business.
- Work with and support the development team, including review of peer code per code style and development guidelines.
- Scrum master to help manage projects, keeping the team on-track and efficient with the scope and planning.
- Reporting project and product status to the greater corporate team.
- Participate in partner integration meetings, proof of concepts, and support (L4).
- Manage the continuous integration and testing pipeline to make sure that released software is to the highest standard of quality.

Key Skills/Technologies:

Mobile App development (CoreMotion, CoreML, AVFramework, PureLayout, Kiwi, Jazzy, Flutter, React Native, Code Coverage, Objective C, Swift, CocoaPods, Swift Package Manager), AWS Cloud (Cognito, S3, Lambda, Serverless, APIGW, CloudFront, DynamoDB, Aurora, Kinesis, SNS, IAM, Boto3), Terraform, Azure, Databricks, Microsoft Office 365 Admin Panel, Azure Entra / Active Directory, Ansible, Python, Go.

#### IBM Software Engineer [QA, Unix/Security/Network, Mobile/iOS, Web, Dev Lead, CI/CD]

Role Description:

- One of two developers for MaaS360 Secure Browser app. [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.
- Development team lead and scrum master role for unannounced security product.
- PaaS based cloud offering security product.
- 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 (<u>https://www.ibm.com/docs/en/sss/3.1.1?topic=siteprotector-overview</u>).
- *IBM Security Host Protection* for Linux/AIX/Unix.
- IBM Security Network Protection (XGS).
- IBM QRadar [https://www.ibm.com/products/qradar-siem].

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, Ilvm, ddd, posix), Shell scripting (SH, BASH), Package management (RPM, AIX installp), JavaScript, Angular.JS, Java EE, JUnit, Mockito, ElasticSearch DB, HTML5/CSS3, Ionic, Test Driven Development (TDD), Behaviour Driven Development (BDD), Objective-C (iOS), UIWebView, NSURL\*, Encrypted Core Data (SQLite backing DB), XCode, PKI, Trello, Jira, SVN, GIT.

#### 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 (<u>https://www.canteen.org.au</u>) 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.

# **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 (<u>https://maylandsrotary.club</u>), and at times served as President, and Secretary.