Dr. Maximilian Wittmann

Doctor of Computer Science

Bachelor of Computer Science with First Class Honors

Since getting my first computer as a Christmas present (an Olivetti 386) I have been passionate about computing. An undergraduate degree in Computer Science allowed me to pursue as well as reinforce that passion, so much so that I decided to complete a doctorate in computing. While the academic setting taught me many valuable lessons, I longed to be involved in developing software with direct practical applications.

Moving to industry has allowed me to round out my skillset, to move beyond mere programming to the engineering of quality, well-tested software in a team environment. In addition my experience as a consultant has given me experience in dealing with stakeholders and has let me better understand the way in which software produces customer value, and how such value can be measured.

The combination of over ten years' programming experience in both academic and industry settings has given me rare perspective of Information Technology as a whole. I desire to work with cutting-edge technologies, eschewing the well-trodden paths in favor of new technological frontiers so I can contribute to making the world a better, less complicated place.

# Experience

## > October 2014 - Now: Software Developer @ Covata Australia

Responsible for developing a security application using a Java + Scala + Angular + Spring stack in an Agile team. In addition to software development skills, the role also requires aspects of a Business Analyst, with all team members expected to contribute to the ongoing design and improvement of the product.

Some highlights so far:

* Won our internal spike day for the development of an approach to non-destructively reorganizing data through alternate storage (currently serialization, but optimally use of a NoSQL database) of certain database views.
* Led the development of our (multi-client RESTful web-API) product’s internationalization framework.

> October 2013 – October 2014:   
Graduate Software Developer @ ThoughtWorks Australia

Part of ThoughtWorks professional services (consulting services) as a software developer. During my year at ThoughtWorks I worked with several clients:

* Software Developer @ a Major Australian bank

Ongoing improvement of an online insurance sales platform. The platform backend is Spring-based and it employs a single-page client-side MVC front-end built on angular.

* Dev Ops @ a Major Australian bank

Transitioning the client from a privately-hosted cloud located in a traditional data center to a cloud hosted using Amazon Web Services (AWS). Ansible was utilized to automatically deploy web applications to AWS and to provision the necessary infrastructure.

* Software Developer @ a Non-profit organization

Development of an online questionnaire web application for mobile devices. The web application was built on the Javascript node.js framework backed by a MySQL database.

* Continoous Integration consultant @ a Large beverage distributor

Tasked with introducing Agile quality assurance practices, including an automated testing framework and continuous integration (CI) facilitated by CI pipeline software. Responsibilities included setting up the framework and required technologies as well as supporting the local development team in adopting Agile development practices.

## > 2003-2012: Casual Tertiary Educator (Lecturer, Practical Supervisor and Tutorial Demonstrator) and Casual Research Assistant @ Macquarie University

Lecturer, tutorial demonstrator and practical supervisor for the unit “Introduction to Computer Graphics”. Responsibilities included the development of lecture material, the development of both assignments, the setting of examination questions, responsibility for the technical aspects of the unit as well as assistance in organising and running the unit throughout the semester.

Practical supervisor and tutorial demonstrator at Macquarie University for Computing units. Responsibilities included assisting students with practical problems, leading tutorials and student assessment.

Research assistant to Dr. Matt Bower. Responsible for the production of a literature review for an ARC discovery project grant application.

# Education

## > 2008-2013: Doctor of Computer Science @ Macquarie University, Australia

The doctoral project, conducted with a MQRES (The Macquarie University Research Excellence Scholarships) involved the analysis of version repositories produced by students during their work on Computer Graphics assignment projects in order to identify student problems and issues with Computer Graphics programming. The analysis involved the development of a software tool for the analysis of version histories (called SCORE) as well as the development of software engineering methods for the machine-analysis of version histories.

> 2005-2007:   
Bachelor of Computer Science with Honors (First Class) @ Macquarie University, Australia

The honors project involved the development of a tool for the placement of objects in a room. This tool was utilized to explore the nature of human memory through a controlled experiment in which participants were asked to reconstruct the room from memory and the order of their placement actions was recorded.

## > 2001-2005: Bachelor of Computer Science (GPA 3.743) @ Macquarie University, Australia

# Skills

## > Programming Languages :

Expert:

* Java

Proficient:

* Javascript
* Scala
* Html/(S)CSS
* SQL

Some exposure:

* C/C++
* Clojure

## > Frameworks and Technologies :

Proficient:

* Spring
* JUnit testing framework (JUnit / Mockito / PowerMock)

Some exposure:

* Angular
* Play
* Node.js
* Various build / dependency management tools (Gradle, Grunt, npm)