

# Evgeni Sergeev (Mr.)

evgeni.sergeev@vrshed.com  
Phone: +61 (0)8 9203 7357

---

Degrees from the University of Western Australia:

- **Bachelor of Computer and Mathematical Sciences with First Class Honours 2009 (BCM)**
- **Bachelor of Engineering (Electrical and Electronic) with First Class Honours 2008 (BE)**

BCM majors:    ◦ Computer Science  
                  ◦ Pure Mathematics

## 2009: Student

- Honours project: *Tracking boundaries in video via segmentation.*
- Awarded the *Hackett Foundation Alumni Honours Scholarship.*
- Awarded a scholarship to attend the *Short Course in Computational Neuroscience* at the Queensland Brain Institute.
- **Prize:** *Adept Electronic Solutions Prize.* Highest mark in Computer Vision.

## 2008

- Honours project: *Multimodal behaviour learning for mobile robots.*
- **Prize:** *Lateral Sands Prize in Digital Microelectronics System Design.* Highest mark in this unit.
- Completed the BCM/BE combined course with GPA 6.857 (out of 7.000) and WAM 90.524 (out of 100).

## 2007

- Unit average: **90.**
- **Prize:** *Tesla Prize for Electromagnetic Theory.* Highest mark in Electromagnetic Theory.
- **Prize:** *Farnell Prize in Electrical and Electronic Engineering.* Highest mark in Circuits and Electronic Systems 3.
- **Prize:** *WATRI Prize in Electrical and Electronic Engineering.* Highest mark in Communications Systems.
- **Prize:** *Telford Prize in Engineering.* Highest average across third year units of the Engineering component of a combined degree.

## 2006

- Unit average: **93.**
- **Prize:** *Honeywell Prize for Professional Computing.* Best team in the software engineering project unit, Professional Computing. With an excellent team, we have developed an instant messaging application based on the Jabber protocol, for Windows Mobile, in C#.
- **Finalists:** *WAITTA—Student Project category.* (For the same project.)

## 2005

- Unit average: **94.**
- **Prize:** *CCK Financial Solutions Prize.* Equal-highest mark in Data Structures and Algorithms.

## 2004

- Unit average: **92.**
- **Prize:** *UWA Graduates Association Prize.* Highest weighted average mark, in the faculty, for the most recently completed one year equivalent of units.

- **Prize:** *Woodside Energy Ltd. Prize in Engineering.* Highest average mark in the foundation units of the Bachelor of Engineering course.
- **Prize:** *Sun Microsystems Australia Prize in Java Programming.* Highest mark in Java Programming.
- **Prize:** *Weatherburn Medal in Mathematics.* Best student completing Calculus and Linear Algebra and Calculus, Statistics and Probability.

## School studies (Churchlands Senior High School)

- TER: **99.55** (Roughly: top half-percentile of school-leaver WA population in 2003).
- Certificate of Distinction in Applicable Mathematics (state-wide). Shared with 21 others.
- Certificate of Distinction in Information Systems (state-wide). Shared with another recipient.
- Certificate of Excellence.

## Work experience

### VRShed Pty Ltd

2008–

Architectural and online-targeted optimised 3D modelling. Systems administration.

### Thales Australia

2006–2008

Software engineering and IT systems maintenance at Thales Australia, for a total of 21 weeks during university holidays. Contributed to the development of a web-served, database-backed management information system. Used the Ajax framework Echo, Java and Hibernate.

## Extra-curricular

2010

- Prize for the South Pacific region at the ACM ICPC World Finals held in Harbin, China. We placed 62nd out of the 103 teams which have advanced to the World Finals from a field of over 7000 teams.

2009

- Champions of the South Pacific region (Australia and New Zealand) of the *ACM International Collegiate Programming Contest*. (Team of three.) First team from Western Australia to be invited to the ACM ICPC World Finals in 20 years of the region's existence.
- Third-placed team for 2009 in the *Australia and New Zealand Algorithmics and Computing (ANZAC) League*, sponsored by Optiver. (The same team of three.)
- Third place in the main category of the *JavaFX Coding Challenge* run by Sun Microsystems. (US\$5000 prize.)
- Developed *Sketchlife*, a tool allowing content creation for Second Life in Google SketchUp. (Ruby and PHP.) <http://vrshed.com/sketchlife/>

2008

- Competed in the ACM ICPC, the team taking first place in WA and fifth Australia-wide.
- Second place at the *Communications Systems Animations Competition* run by the School of Electrical, Electronic and Computer Engineering, UWA.
- Guide at the *OutThere* Square Kilometre Array event at UWA for high-school students.

## 2007

- Part of a team winning the Google *Build Your Campus in 3D* Competition (Australia and New Zealand).

## 2006

- Blakers Mathematics Competition (for WA undergraduates): Third Year Prize.
- Competed in the ACM ICPC, the team taking fourth place in WA.

## 2005

- Volunteer work for a lecturer's project at the UWA School of Mathematics and Statistics. Created an online exercise system prototype with L<sup>A</sup>T<sub>E</sub>X and Python.

## 2004

- Blakers Mathematics Competition: First Year Prize.

## 2003-

- **Tournament of Towns** (international mathematics competition): participated for two and a half years. Diploma (distinction): one of four in WA in the 2001–2002 rounds.
- Australasian Schools Computer Competition: medal, equal top mark in WA, 2003.
- Good results in various other competitions.

## Skills

An understanding of mathematical abstraction applicable to algorithms: abstract algebra, linear algebra, multivariate calculus, graphs, algorithmic complexity, proof techniques. Experience in problem solving.

An understanding of computers from fundamental principles to high level software: analogue and digital circuits, the von Neumann architecture, operating systems, low and high level programming languages. Comfortable with object-oriented programming.

I understand the importance of communication within a team. In the past I have always supported constructive communication.

## Primary languages

**Python, C++, Jython, Java.**

**XHTML, CSS and JavaScript.** Conscious of standards and browser support issues.

## Other languages

Brief knowledge of C#, SQL, Perl, Ruby, Haskell, Prolog, Smalltalk, PHP, Visual Basic, VHDL and the assembly language for the Motorola 68HC12 microcontroller. Able to adapt to new languages.

## Miscellaneous

Experience with a wide range of application software, including Vim, L<sup>A</sup>T<sub>E</sub>X, Matlab, PSpice, SketchUp, Blender, Flash, graphics editors, Subversion, Eclipse, Cygwin and MinGW, Linux utilities.

Designed and maintain <http://nik-sergeev.com/>.

Capable of native-quality written translation between English and Russian.

Arrived in Australia in 1997. An Australian citizen since 1999. Hold an Australian national security RESTRICTED clearance.