Philip Schlup, PhD

Address	41 Newport St, Dunedin 9011, New Zealand
Email	philip.schlup@gmail.com
Mobile	+64 21 718 382
LinkedIn	www.linkedin.com/in/philip-schlup

PROFESSIONAL EXPERIENCE

Feb. 2021-present

Senior Integrations Developer (The Tarn Group, Dunedin, New Zealand)
- Design and build e-learning integrations with external parties.

Software technologies: **C# .NET Core, React, T-SQL, GraphQL.**

Jun. 2019-Feb. 2021

Senior Integrations Developer (TracMap, Mosgiel, New Zealand)
- In partnership with internal and external stakeholders, led the design and implementation of third-party integration portals.
- Analysed business and geospatial data for improved processes.

Software technologies: **Python, PostgresSQL, PostGIS, REST, Git.**

Oct. 2017-Jun. 2019

Senior Developer (Education Perfect, Dunedin, New Zealand)
- Worked with product owners, graphic designer, and content creators improve the software platform.
- Designed and created new interactive e-learning elements.
- Led ongoing development of math component in collaboration with mathematics team.
- Wrote translator to read math formulas in LaTeX as speech.
- Shared responsibility for releasing code updates.

Software technologies: **TypeScript, Vue, AngularJS, MathQuill, Mercurial, Jira.**

Apr. 2016-Sep. 2017

Software Development Manager (The Tarn Group, Dunedin, New Zealand)
- Advised management on product design and roadmap based on client requirements.
- Managed tasking and delivery for a team of five developers.

Jan. 2011-Apr. 2016

Senior Software Developer (The Tarn Group, Dunedin, New Zealand)
- Developed majority of front-end for an e-learning platform.
- Worked closely with stakeholders and the design team on new features and ongoing improvements.
- Created interface layers for PowerPoint, SCORM, and HTML5.

Software technologies: **JavaScript, C# ASP.NET, SQL, HTML5.**

Since Jun. 2008

Software developer, animator, video editor (Freelance contractor)
- Collected client requirements and prepared project plans.
- Liaised with the client and incorporated feedback throughout project.
- Delivered final product on or ahead of schedule.

Software technologies: **ActionScript, Blender, Final Cut Pro, Illustrator**.

| Jan. 2006-Nov. 2010 | **Research Scientist** (Colorado State University, Fort Collins, CO, USA) |

- Constructed lasers and applied these to spectroscopy and imaging.
- Wrote data acquisition software to interface with DAQs, stepper motors, spectrometers, and other measurement equipment.
- Participated in multi-team collaborative experiments.
- Created interactive laser modeling tool (personal project).

Software technologies: **Win32/C++, Matlab, LabView, OpenGL**.
Publications: 35 articles, 6 conferences, 1 chapter, 1 patent.

| Jan. 2003-Dec. 2005 | **Post-Doctoral Researcher** (Swiss Federal Institute of Technology – ETH, Zürich, Switzerland) |

- Constructed optical systems to manipulate laser sources.
- Performed single-atom experiments in ultrahigh vacuum systems.
- Modeled laser and atomic interactions.

Software technologies: **Win32/C++, Matlab, Cocoa**.
Publications: 9 articles, 11 conferences, 1 chapter.

EDUCATION

| Jan. 1998-Dec. 2003 | **PhD Physics** (University of Otago, Dunedin, New Zealand) |

Built and analyzed lasers and nonlinear optical sources for chemical spectroscopy. Awarded scholarships to study at Macquarie University (Sydney, Australia), University of St Andrews (St Andrews, Scotland, UK), and Coherent Technologies Inc. (Lafayette, CO, USA).
Thesis: **Passive Optical Bandwidth Control of Quasi-Phase Matched Optical Parametric Oscillators.**
Publications: 8 articles, 3 conferences.

| Jan. 1994-Dec. 1997 | **BSc (Hons, First class)** Physics (University of Otago, Dunedin, New Zealand) |

Dissertation: **Studies of Injection Seeding and Threshold in β-BaB_2O_4 Optical Parametric Oscillator***.*
Publications: 2 articles.

| Feb. 2015-Dec. 2017 | **Diploma in Digital Filmmaking** (Southern Institute of Technology, New Zealand). |

LANGUAGES

English	Native
German	Native
Spanish	Intermediate (A2)
French	Beginner