

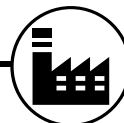
# TIMOTHY KOL

## — PROFILE



I am a researcher who is passionate about computer graphics. I love seeing mathematics and code come to life in beautiful renderings, especially in the context of visual effects and game industry applications. I enjoy working at the intersection of research and development, making new contributions to the community while seeing them being applied first-hand. My research interests include alternative representations and rendering techniques for large virtual worlds, both in real-time and offline scenarios.

## — WORK EXPERIENCE



- 01/2018 - today: computer graphics researcher at *OLM Digital, Inc.* in Tokyo, Japan, an animation studio. Work consists of researching and developing plug-ins for Autodesk Maya, Adobe After Effects, etc., to be used by the company's artists in production.
- 03/2011 - 02/2013: Web developer at *Silicomp Software BV* in Rotterdam, The Netherlands, a software development company specialized in the tire and car parts industry. Work consisted of design and implementation of online shops and web services, and consultation with clients.
- 04/2011 - 07/2011: Game programmer at *Nexgen Studio, Pve. Ltd.* in Singapore, a game development company. Work consisted of design and implementation of mini-games based on speech recognition as part of an educative game, and consultation with clients.

## — EDUCATION



- 12/2013 - 12/2017: PhD in the *Computer Graphics and Visualization* group at *Delft University of Technology* in The Netherlands. Research on representations of large virtual worlds as part of the *Harvest4D* EU project consortium. Graduated with my dissertation *Representing Large Virtual Worlds*.
- 09/2011 - 11/2013: Master of Science in *Game and Media Technology* (Computer Science) at *Utrecht University* in The Netherlands. Main focus on computer graphics. Graduated *cum laude* with my master thesis *Real-Time Cloud Rendering on the GPU*, with an average rounded grade of 8.5.
- 09/2008 - 09/2011: Bachelor of Science in *Computer Science* at *Delft University of Technology* in The Netherlands. Main focus on media and knowledge engineering. Graduated with an average rounded grade of 7.5. Additionally took a minor in *Economics, Law and Management*.
- 08/2002 - 06/2008: VWO+ at *SG Spieringshoek* in Schiedam, the highest level of secondary education in The Netherlands. Main focus on natural sciences and technology. Graduated with an average rounded grade of 7.5. Additionally took *Spanish, Biology* and *Computer Science* as extracurricular courses.

## PUBLICATIONS



- 📖 *MegaViews: Scalable Many-View Rendering with Concurrent Scene-View Hierarchy Traversal*. T.R. Kol, P. Bauszat, S. Lee and E. Eisemann. In *Computer Graphics Forum*, 2018.
- 📖 *Expressive Single Scattering for Light Shaft Stylization*. T.R. Kol, O. Klehm, H.-P. Seidel and E. Eisemann. In *IEEE Transactions on Visualization and Computer Graphics*, 2017.
- 📖 *Geometry and Attribute Compression for Voxel Scenes*. B. Dado, T.R. Kol, P. Bauszat, J.-M. Thiery, E. Eisemann. In *Computer Graphics Forum*, 2016.
- 📖 *Stylized Scattering via Transfer Functions and Occluder Manipulation*. O. Klehm, T.R. Kol, H.-P. Seidel and E. Eisemann. Proceedings of *Graphics Interface*, 2015.
- 📖 *An Interactive Simulation and Visualization Tool for Flood Analysis Usable for Practitioners*. J.G. Leskens, C. Kehl, T. Tutenel, T.R. Kol, G. de Haan, G. Stelling and E. Eisemann. In *Mitigation and Adaptation Strategies for Global Change*, 2015.
- 📖 *Real-Time Canonical-Angle Views in 3D Virtual Cities*. T.R. Kol, J. Liao and E. Eisemann. Proceedings of *Vision, Modeling & Visualization*, 2014.

## SKILLS



- ⚙️ Programming in C++, OpenGL and GLSL, with the Maya, mental ray and Arnold APIs; C# and WPF; Java; Python; PHP, HTML, CSS and SQL.
- ⚙️ 2D and 3D design, with Photoshop, Illustrator, After Effects, Maya and 3DS Max in particular.
- ⚙️ Working on projects in a team, as this was the norm during my education.
- ⚙️ Familiar with logic, automata theory and complexity theory.
- ⚙️ Fluent in Dutch and English, and basic knowledge of Spanish, German and Japanese.

## INTERESTS



- 🏈 Playing football, working out, running and other sports.
- 🌍 Traveling; organizing holidays with friends, meeting new people, improving my knowledge about nature and different cultures.

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