

# Ruben Wiersma

7 September 1994 • [rubenwiersma@gmail.com](mailto:rubenwiersma@gmail.com) • +316 278 799 30 • Delft, NL • [rubenwiersma.nl](http://rubenwiersma.nl)



I am a second-year PhD student in computer graphics at the TU Delft. My interests include geometry processing, animation, simulation, and machine learning. I have gathered experience as a [programmer](#), graphic designer, and filmmaker during my undergraduate years. You can find some examples of [on my portfolio](#).

## SKILLS AND QUALITIES

Strong math understanding • Ability to understand and analyze complex systems • Eye for clean, maintainable, and understandable code - [example project](#) • Creative thinking • Presentation and communication - [example presentation](#) • Determination • C++ • Python • Linux • macOS • Blender • Adobe CC • Piano

## EDUCATION

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### [2019 - present] PhD Computer Graphics

*TU Delft* Supervised by Elmar Eisemann, Klaus Hildebrandt and Joris Dik

- Studying applications of computer graphics and machine learning for painting analysis.
- Studying fundamentals and applications of geometric deep learning.
- Additional responsibilities: lecturing, lab assistance, creating assignments.
- Toolkit: C++, OpenGL, Python, PyTorch.

### [2017 - 2019] MSc Computer Science *Cum Laude* (GPA 4.0)

*TU Delft*

- Focus on computer graphics and machine learning.
- Thesis (grade 9/10 “Harmonic Surface Networks” [[PDF download](#)]).
- Toolkit: C++, Python, PyTorch.

### [2014 - 2017] BSc Computer Science *Cum Laude* (GPA 4.0)

*TU Delft*

- Focus on multimedia and data science.
- Thesis on “Automating Valuations for Real-Estate” [[PDF download](#)].

### [2013 - 2014] Propedeuse Industrial Design Engineering *Cum Laude*

*TU Delft*

## EXPERIENCE

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### [2019] Teaching Assistant

*TU Delft*

- Developed assignments for new datamining and Machine Learning courses and lab assistance.
- Toolkit: Python, Jupyter, NumPy

### [2017] Development Internship

*GeoPhy*

- End-to-end machine learning solution for estimating real-estate value.
- Toolkit: Scala, Apache Kafka.

## **[2012 - present] Video producer, graphic designer**

*Wiersma Brothers, Torchbearers International, freelance*

- Wiersma Brothers: founder, producing video's and short films.
- Torchbearers International: creative director and web development. View [samples of my work](#).
- Freelance work in graphic design and web development.

## **[2008-2010] Programmer**

*GoPublic*

- Back-end developer for websites and business administration webapps.
- Toolkit: PHP, JavaScript, HTML.

## **VOLUNTEERING**

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### **[2020 - present] SIGGRAPH Committee member**

*Research and career development committee*

- Organizing conference coffee event (social event at SIGGRAPH '21.
- Creating and maintaining committee website.

### **[2020 - present] Reviewer**

*ACM Transactions on Graphics, Pacific Graphics*

### **[2013 - 2019] Committee member, committee chair**

*C.S.R. Delft, The Veritas Forum Delft*

- Organised academic debat and events for society anniversary.
- Produced several narrative short films.
- Produced, designed and organised the presentation event for an anniversary book.
- Organized several academic debates and hosted lectures (20-200 audience members .

### **[2014 - 2017] Restaurant staff manager, PR**

*Happietaria, Hartige Samaritaan*

Happietaria is a pop-up restaurant for charity, lasting one month. Hartige Samaritaan is a variant that is organised with Refugees.

- Managed the restaurant staff for the Happietaria (November 2014 .
- Together with all the volunteers for Happietaria, raised €78.913.
- Communications manager for Hartige Samaritaan (February 2017 .

## **PUBLICATIONS**

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### **[SIGGRAPH '20] CNNs on Surfaces using Rotation-Equivariant Features**

*July 2020*

### **[Heritage Science] Revealing unique inscriptions of a Nazi collaborator in Doodencel 601 of the Oranjehotel**

*July 2020*

### **[SIGCSE '20] Are We Consistent? The Effects of Digitized Exams Grading**

*February 2020*

[Master's thesis] Harmonic Surface Networks

*October 2019*

## GRANTS

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**Google Cloud Research credits**

*October 2019, October 2020*

## TALKS

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**17th May 2021, Utrecht University**

Lecture on applications of computer graphics to painting analysis for bachelor students in art history.

**27th September 2020, PI Lab TU Delft**

Seminar talk: applications of computer graphics to painting analysis.

**14th May 2020, Stanford Guibas Lab**

Invited talk: CNNs on Surfaces using Rotation-Equivariant Features

**July 2020, SIGGRAPH**

Technical papers presentation: CNNs on Surfaces using Rotation-Equivariant Features