## Ruben Wiersma

7 September 1994 • <u>rubenwiersma@gmail.com</u> • +316 278 799 30 • NL • <u>rubenwiersma.nl</u>



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 <u>programmer</u>, graphic designer, and filmmaker during my undergraduate years. You can find some examples of <u>on my portfolio</u>.

#### **SKILLS AND QUALITIES**

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

#### **EDUCATION**

#### [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**

#### [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 and business administration webapps.
- Toolkit: PHP, JavaScript, HTML.

#### VOLUNTEERING

#### [2020 - present] Committee member

SIGGRAPH research and career development committee

- Organizing conference coffee event (social event) at SIGGRAPH '21.
- Media support for SIGGRAPH Thesis Fast Forward '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 (student association)

- Researched and advised on the association leadership election reform.
- Organised festivities for society anniversary (> 200 participants).
- Produced several narrative short films and an anniversary book.
- Organized 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**

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

July 2020

# [Heritage Science] <u>Revealing unique inscriptions of a Nazi collaborator in Doodencel 601 of the Oranjehotel</u>

July 2020

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

February 2020

## [Master's thesis] Harmonic Surface Networks

October 2019

#### **GRANTS**

#### **Google Cloud Research credits**

October 2019, October 2020

#### **TALKS**

## 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: <u>CNNs on Surfaces using Rotation-Equivariant Features</u>

## July 2020, SIGGRAPH

Technical papers presentation: <u>CNNs on Surfaces using Rotation-Equivariant Features</u>