

# PIERRE KORNPÖBST

PhD in Mathematics, with an expertise in vision science

<http://www-sop.inria.fr/members/Pierre.Kornprobst>  
Inria Sophia Antipolis Méditerranée

## EMPLOYMENT

### SENIOR RESEARCH SCIENTIST (DR2)

**INRIA** 01/2019-ongoing, Sophia Antipolis, France

In charge of research axis 'Diagnosis, rehabilitation, and low-vision aids'

### JUNIOR RESEARCH SCIENTIST (CR2/CR1)

**INRIA** 07/2000-12/2018, Sophia Antipolis, France

- In 2016, co-creation of the Biovision team about vision impairment
- From 2000 to 2016, member of several Inria teams, with a thematic mobility from computer vision to visual neuroscience

### COOPERANT AU SERVICE NATIONAL EN ENTREPRISE (CSNE)

**University of Southern California** 01/1999-06/2000, Los Angeles, USA

Sponsored by MATRA Système et Information

## EDUCATION

### HABILITATION (HDR)

**Université Nice Sophia Antipolis**, 2008

### PhD in MATHEMATICS

**Université Nice Sophia Antipolis**, 1998

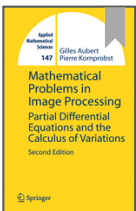
MESR grant, Mention très honorable avec les félicitations du jury

## SCIENTIFIC ACTIVITIES AND RESPONSIBILITIES

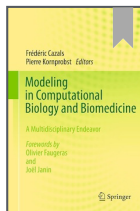
### PUBLICATIONS

#### In Mathematics, Computer Vision and Visual Neuroscience

35 journal papers, >40 conferences, including major peer-reviewed conferences (such as CVPR, MICCAI, IJCAI), 1 book as co-author (Springer, 2011, > 2000 citations), 1 book as co-editor (Springer, 2006), 3 book chapters, 1 course note (from three tutorials given at SIGGRAPH (1) and CVPR (2))



Mathematical problems in image processing, Springer



Modeling in Computational Biology and Biomedicine Springer



Bilateral filtering

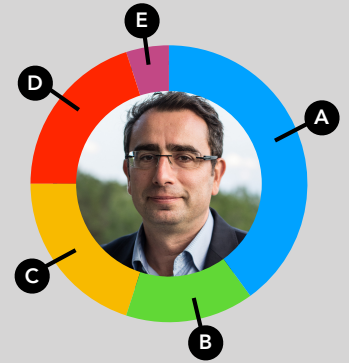
### SUPERVISION OF RESEARCH ACTIVITIES

- 3 Ph.D. ongoing, 5 Ph.D. defended, 20 Master internships, 8 postdoctoral fellows
- Most of my past Postdoc and PhDs are now successfully working on computer vision or neuroscience in academy or in industry

### PROFESSIONAL ACTIVITIES

- >20 conference program committees, since 2003
- 7 Ph.D./HDR committees (France, Spain)
- Workpackage leader in two European projects (FP7, FET and ICT) and one ANR
- Member of the Academic Board of Université Côte d'Azur (CAc), 2015-2019
- Member of the Administration Board of Université Côte d'Azur (CA), 2019-2023

## AREAS OF EXPERTISE



- A** Computer Vision
- B** Virtual Reality
- C** Low Vision
- D** Visual Neuroscience
- E** Entrepreneurship

## CURRENT RESEARCH FOCUS

Unveiling fundamental mechanisms of visual perception of people with visual impairments, to predict their needs and better address them through the development innovative solutions

## SPOTLIGHT: SOCIO-ECONOMIC IMPACT AND TRANSFERT

### PARTNERSHIP

#### Demain un Autre Jour

CIFRE contract (2023-2026), 3 years. Computational approaches for newspaper lay-outing

### PRE-MATURATION PROJECT

#### VREAD project, UCA grant

Project leader, 2017-19, 22 mos APP deposit

<http://tiny.cc/8q8xez>

- PoC of an accessible reading platform in virtual reality for books and augmented reading experiences
- investigation of the potential markets (lean startup methodology)

### CODE TRANSFER

#### Realviz startup, 1998

Code on optical flow estimation from my PhD transferred and used in the product "Retimer"

Last update: August 2024