# Waldir Pimenta — Curriculum Vitae

## **Personal Information**

Name: Waldir Pimenta

**Date of birth:** 16 February 1986 **Citizenship:** Cape Verde and Portugal

Address: Rua da Universidade nº 48, hab. 303 / 4710-057 Braga, Portugal (74+8R Gualtar)

Mobile phone: (+351) 93 5890 488 Email: waldir.pimenta@gmail.com LinkedIn profile: linkedin.com/in/waldir Website: www.waldirpimenta.com

## **Skills and Competencies**

**Skills:** Programming, 3D modeling/animation, photo/audio/video editing, vector illustration **Tools (graphics):** OpenGL, OpenCV, Qt, VTK, DICOM, (X)HTML/JavaScript/CSS, SVG

Tools (other): Git, Linux, PHP, SQL, LaTeX, C/C++/C#, Python, Julia

Certifications: Pedagogical Competences Certificate (CCP/CAP) n. F614065/2013

## Education

#### PhD in Computer-generated holography

- minho University (www.uminho.pt) | Braga, Portugal
- S Feb/2011 → present
- F Thesis: Exploiting Coherence in Rendering for Computer Generated Holography

## Master of Computer Science in Computer Graphics and Artificial Intelligence

- minho University (www.uminho.pt) | Braga, Portugal
- $\bigcirc$  Oct/2008  $\rightarrow$  Dec/2010 (2 years, 2 months)
- Face recognition using 3D structural geometry of rigid features extracted from 2D images
- Final grade: 17 out of 20 (equivalent to an A grade)

#### Bachelor of Computer Science in Computer Graphics and Multimedia

- m Polytechnic Institute of Viana do Castelo (www.ipvc.pt) | Viana do Castelo, Portugal
- $\bigcirc$  Sep/2004  $\rightarrow$  Mar/2008 (3 years, 7 months)
- Final project: C# image processing software to convert raster topographic maps to SVG
- Final grade: 16 out of 20 (equivalent to an A grade)

# **Professional Experience**

#### Software developer

- Peekmed (www.peekmed.com) | Braga, Portugal
- Nov/2015 → present
- Worked on a 3D surgical planning application based on DICOM medical imaging

#### Software developer (Erasmus internship)

- Vicomtech (www.vicomtech.es) | Donostia-San Sebastián, Spain
- Mar/2010 → Oct/2010 (8 months)
- Developed a face recognition application in C++ using Qt and OpenCV

#### Augmented Reality (AR) developer

- CCG Computer Graphics Center (www.ccg.pt) | Guimarães, Portugal
- $\bigcirc$  Jul/2009  $\rightarrow$  Jan/2010 (7 months)
- 3D modeling/animation; built Augmented Reality application in Virtools

#### Web developer (part-time)

- Ruiiur (www.ruiiur.pt) | Porto, Portugal
- Nov/2008 → May/2010 (1 year, 7 months)
- Web development: HTML, CSS, Javascript

## **Publications**

## Evaluation of the compressibility of Computer-Generated Holograms [Ps]

- W. Pimenta, L. P. Santos (2015)
- 36th Annual Conference of the European Association for Computer Graphics (Eurographics)
- ♀ Zürich, Switzerland (presented in the conference)

#### Efficient generic face model fitting to images and videos [Jr]

- L. Unzueta, W. Pimenta, J. Goenetxea, L. P. Santos, F. Dornaika (2014)
- Image and Vision Computing 32 (5), 321-334.

## An intuitive navigation system: Augmented Reality on the car windshield [Ps]

- W. Pimenta (2012)
- 20º Encontro Português de Computação Gráfica (EPCG)
- ♥ Viana do Castelo, Portugal (presented in the conference)

#### A comprehensive taxonomy for three-dimensional displays [Cf]

- W. Pimenta, L. P. Santos (2012)
- 20th International Conference on Computer Graphics, Visualization and Computer Vision (WSCG)
- Plzeň, Czech Republic (presented in the conference)

## Using AR virtual assistants to teach the traditional leather tanning process [Cf]

- L. Carvalho, G. Maçães, W. Pimenta (2011)
- 6ª Conferência Ibérica de Sistemas e Tecnologias de Informação (CISTI)

## Face recognition using 3D geometry of rigid features extracted from 2D images [Th]

- **!** W. Pimenta (2010)
- Master's thesis Minho University
- Braga, Portugal

[Jr]: Journal article; [Cf]: Conference article; [Ps]: Poster; [Th]: Thesis

## **Awards and Achievements**

- 2011: 2nd place scientific award, Fraunhofer Portugal Challenge
- 2004: Winner of public contest for the coat of arms of the Paul municipality, Cape Verde
- 2004: Athlete of the Year award by the City Hall of Mindelo, Cape Verde
- 2003: Gold medal (male junior kata), XIII World Koshiki Karate-dō Championship, Lisbon, Portugal.
- 2003: Winner of public contest for the coat of arms of the Sal municipality, Cape Verde

# **Projects and Activities**

#### **Groups and organizations**

- Rendimento Básico Portugal: Co-founder (2013), technical lead, meetings coordinator.
- Wikimedia Portugal: Co-founder, president, member of the board (2009 present).
- Member of the Permanent Commission of the Pedagogical Council of IPVC (2007)
- President or board member of various student's unions (2001 to 2008).

#### Participation in events

- Wikimedia Hackathon 2012 (Berlin), 2013 (Amsterdam), 2014 (Zurich)
- Wikimania 2007 (Taiwan), 2010 (Poland), 2011 (Israel), 2013 (Hong Kong)
- TEDxOPorto (2011), TEDxYouthBraga (2011), TEDxVianadoCastelo (2013)
- Sapo Codebits IV (2010), V (2011). Lisbon, Portugal.
- JCGM Conference III (2005), IV (2006) V (2007), X (2012). Viana do Castelo, Portugal.
- 10º Aniversário da Wikipédia, 15 Jan 2011. Instituto Superior Técnico (IST), Lisbon, Portugal.

#### Writing

- Feb/2005 → present: Volunteer editor on Wikipedia.
- Mar/2002 → Dec/2011 (approx. 10 years): Columnist in the Cape Verdean magazine Artiletra.