

Caecilia Charbonnier - CV



1. PERSONAL DETAILS

Last name: **CHARBONNIER**

First name: **Caecilia**

Sex: Female

Birthdate and place of birth: 7 December 1981, Geneva

Nationality: Swiss and French

Canton of origin: Geneva

Marital status: Single

Number of children: 0

Personal address: 16, rue Dr-Alfred-Vincent
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2. ACTUAL POSITIONS

Founder, President and Research Director

04.2011

Artanim Foundation - Switzerland

Founder, president and research director of Artanim, a foundation dedicated to the development and promotion of motion capture.

Fundraising and development of research projects (EU H2020, CTI, CH SNSF Div. II) in computer graphics, virtual reality and medicine.

Development of educational programs in motion capture, 3D animation, biomechanics and medical imaging. Production activities such as the creation of audiovisual projects and events (3D animations, video games, live performances, interactive applications, etc.).

Portfolio available at: www.artanim.ch

Founder and CTO

12.2016

Dreamscape Immersive Inc. - USA

Founder and CTO of Dreamscape Immersive Inc., a VR entertainment company (formally Artanim Interactive Sàrl, spin-off of Artanim Foundation).

Website: www.dreamscapeimmersive.com

3. DIPLOMAS

Federal Maturity, type C **2001**

**Licence in Information and Communication Systems (master equivalent)
with a minor in International Relations (HEI)** **2001-2005**

University of Geneva, Faculty of Economics and Social Sciences (SES)

- Licence thesis: "Registration of 3D models from MRI using geometric constraints for the anatomical modeling of soft tissues", Thesis Director: Prof. Nadia Magnenat-Thalmann
- Indicative units attended: Databases, Networking, Internet and Multimedia, Object Oriented Programming with Java, Systems Programming, Computer Graphics, Animation and Virtual Reality, Graphical User Interfaces, International Public Law, Political Economy, Political Sciences, Economics History, Political Geography, Sociology

Master of Advanced Studies (MAS) in Computer Graphics **2005-2006**

Polytechnic School of Lausanne (EPFL), Faculty of Sciences, Department of Computer Science

- Master thesis: "Virtual Mirror: A real-time motion capture application for virtual-try-on", Thesis Director: Prof. Nadia Magnenat-Thalmann
- Indicative units attended: Computer Graphics, Image Processing and Computer Vision, VR Programming with Java and C++, Visualization, Animation and Virtual Reality, Internet and Multimedia, Scientific and Medical Communication

PhD in Science, interdisciplinary mention (*summa cum laude*) **2007-2010**

University of Geneva, Faculty of Sciences, Department of Computer Science

Title of the thesis: "Extreme Hip Movements Based on Optical Motion Capture"

Thesis director: Prof. Nadia Magnenat-Thalmann, University of Geneva

Jury members: Prof. José Rolim (University of Geneva), Prof. Franz-Erich Wolter (Leibniz Hannover University), Dr. Mark de Zee (Aalborg University) and Dr. Eric Stindel (University Hospital of Brest)

Certificate of Good Clinical Practice for co-investigators **2014**

University Hospitals of Geneva / Faculty of Medicine, University of Geneva

Approved by Swissmedic, AGEK, SAMS, ISFM, SSIC, SCTO

Good Clinical Practice Course for sponsors-investigators / investigators **2015**

University Hospitals of Geneva / Faculty of Medicine, University of Geneva

Approved by Swissmedic, AGEK, SAMS, ISFM, SSIC, SCTO

4. PROFESSIONAL ACTIVITIES

Founder and CEO **2015-2016**

Artanim Interactive Sàrl - Switzerland

Founder and CEO of Artanim Interactive Sàrl, a VR tech company set up as the spin-off of Artanim Foundation.

Founder and Co-Director **2010-2015**

ArtiFX Sàrl - Switzerland

Founder and co-director of ArtiFX Sàrl, a company specialized in extreme filming, visual effects and postproduction.

Participation in the production of movies and documentaries as scriptwriter, photographer and cameraman both terrestrial and underwater (PADI Rescue diver).

Portfolio available at: www.artifx.ch

Secretary General**2010-2013****Agalma Foundation - Switzerland**

Secretary General of Agalma Foundation, a space for reflection and research in neuroscience, psychoanalysis and art.

Management and supervision of the administration, foundation's activities, finances and human resources.

Head of communications and external relations, organizer of international conferences and events.

Member of the Communication Team**2006-2012****Antinea Foundation - Switzerland**

Volunteer for the Antinea Foundation that seeks to improve the scientific knowledge of the oceans in order to protect the marine environment.

3D designer and video maker for the communication projects that aim to sensitize the public to the protection of the environment.

Webmaster of "The Changing Oceans Expedition" website: www.changingoceans.org

Founder and Co-Director**2009-2011****ArtificiElles Sàrl - Switzerland**

Founder and co-director of ArtificiElles Sàrl, a company specialized in 3D and web development.

Design and creation of websites in Flash, PHP, Ajax, 3D modeling and animation, virtual environments, movies and commercials, etc.

Portfolio available at: www.charbonnier.ch

Research Assistant**2004-2010****MIRALab - University of Geneva**

Working at an internationally well-known interdisciplinary graphics and virtual reality research center, interacting with numerous researchers world-wide. Medical research and simulation, including the following topics: optical motion capture and motion analysis, 3D body scanning, biomechanics, ontology, image processing, segmentation, surface deformation and registration.

Publishing research results in international refereed journals and conferences.

Contribution in the following projects:

- CO-ME (SNSF NCCR project): Development of a semantic-driven clinical examination platform, integrating various acquisition modalities (MRI, 3D scanner, motion capture, etc.). Motion study of the hip joint in extreme postures.
- 3D ANATOMICAL HUMAN (UE project, MRTN-CT-2006-035763): Creation of a medical ontology of the musculoskeletal system, manual segmentation and 3D reconstruction of the lower limb from MRI.
- FOCUS K3D (UE project, ICT-2007-214993): Evaluation of knowledge systems and dissemination actions for the adoption and the use of those technologies, in order to foster the coding and sharing of 3D media content.

Actively authoring, contributing and co-managing several Swiss and EU research projects (EU FP6, FP7, CH SNSF Div. II).

Presenter at and co-organizer of international conferences, fairs and events.

Bachelor and master students co-supervision. Assistant for the courses "Outils Informatiques" and "Animation et Multimedia", B.Sc. courses, years 2004 - 2008, University of Geneva.

Webmaster and system administrator of the lab.

Consultant**2001-2009****Télévision Suisse Romande (TSR) - Switzerland**

Consultant and live interviews for sport-related programs, such as Roland-Garros and Wimbledon.

Project Manager **2005-2006**
MIRALab - University of Geneva

Responsible for the administrative management and coordination of EU and Swiss projects in the lab. Tasks including the accountancy and the management of human resources, the redaction of EU and SNSF reports, and the administrative coordination between the various project's partners.

Editor in Chief **2002-2004**
Jet d'Encres - University of Geneva

Editor in chief of the bi-annual newsletter of the Political Sciences and International Relations Department. Coordination of the team, journalist and edition of the journal template.

Tennis Teacher **2001-2004**
Tennis teacher for Youth & Sport, group and individual courses.

Trainee **2002**
Tribune de Genève - Switzerland

Trainee (2 months) for the daily newspaper at the Tribune de Genève, Sports Department.

5. TEACHING / STUDENT SUPERVISION

Pre-graduate academic program

- Visualisation et reconstruction 3D en imagerie médicale : techniques et applications, B.M. course 2230322, 3 ECTS credits, Faculty of medicine, University of Geneva, since 2015 (14 hours / year)
- Technologie et simulation 3D en orthopédie et médecine du sport, B.M. course 2230323, 3 ECTS credits, Faculty of medicine, University of Geneva, since 2014 (20 hours / year)
- Mouvement et la mode, workshop M.A Media Design, 3 ECTS credits, Geneva University of Art and Design, semester 2016-2017 (9 hours)
- 3D Modeling and Animation, M.A course in Media Design, 3 ECTS credits, Geneva University of Art and Design, years 2014-2016 (30 hours / year)
- 3D Modeling and Animation, M.A course in Media Design, 6 ECTS credits, Geneva University of Art and Design, semester 2013-2014 (42 hours)
- Outils Informatiques, B.Sc. course 4104002, 6 ECTS credits, University of Geneva, years 2004-2008 (22 hours / year)
- Animation et Multimédia, B.Sc. course 4204003, 6 ECTS credits, University of Geneva, years 2004-2008 (22 hours / year)

Post-graduate academic program and continuing training

- Capture de mouvement et simulation de l'épaule : applications, continuing training course of the Orthopedics Department, HUG, June 19th 2015 (1 hour)
- Imagerie 3D en radiologie ostéoarticulaire, post-graduate and continuing training course of the Radiology Department, HUG, May 26th 2014 (1 hour)
- La modélisation des articulations en 3D, continuing training course for physiotherapists, HUG, November 10th 2009 (1 hour)

Workshops / tutorials

- Workshop Montreux Jazz Festival 2014: "3DInMotion – Mapping motion capture with musical expression", Montreux Jazz Festival, July 12th 2014 (1 hour)
- Workshop Electron 2014 : "3DIM – Mocal and multichannel audio", Electron Festival, April 20th 2014 (3 hours)

- Workshop WEP2014 : "Behind the scene: from motion capture to 3D character animation", King Abdullah University of Science and Technology, Jeddah, January 23rd-26th-27th 2014 (10 hours)
- Workshop FOCAL : "Introduction à la motion capture : de la capture à l'intégration des données", Neuchâtel International Fantastic Film Festival (NIFFF), July 8th 2013 (6 hours)
- Workshop FOCAL: "Motion Capture : de la capture à l'intégration des données", Artanim, December 21st 2011 (6 hours)
- Tutorial: "3D Body Scanning and Motion Analysis", 3D Physiological Human Workshop, Zermatt, December 3rd 2008 (1 hour)

Student supervision

- Jacky C.K. Chow, Development of a new motion tracking technique of the shoulder in fluoroscopic imaging sequences, 2013, PhD internship, University of Calgary
- Alexandre Corsini, Création d'un manuel d'utilisateur en Flash pour un programme d'animation de cheveux en temps réel, 2007, Bachelor Project, MIRALab, University of Geneva
- Maryam Arasteh, Evaluation and Comparison of latest 2D/3D Web Technologies, 2008, Master Thesis, MIRALab, University of Geneva

6. RESEARCH / FUNDED R&D PROJECTS

The team of Artanim Foundation includes five researchers and one legal/administrative collaborator. The research activities of the laboratory concerned or concern for the most part the following fields:

- Joint biomechanics, in particular the 3D modeling and motion analysis of the hip, knee and shoulder
- 3D simulation and computer-assisted surgical planning of native or prosthetic joints
- 3D body scanning and motion capture from different technologies (optical, inertial, markerless)
- Virtual and augmented reality, real-time motion interaction and 3D animation

List of completed or ongoing R&D projects:

Holomed

Duration: September 2016 - September 2017

Funding: FORE Foundation / La Tour Hospital, Clinique de la Colline - CHF 260,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Development of an augmented reality tool for sport medicine and rehabilitation allowing the visualization and analysis of the anatomy in real time and in motion.

Partners: [Artanim Foundation](#), La Tour Hospital – Division of Orthopedic and Trauma Surgery

Real Virtuality

Duration: April 2015 - April 2018

Funding: Artanim Foundation

Description: Development of an immersive platform combining virtual reality headsets with motion capture for interactive applications and virtual visits.

3D Proto – Strategic Enhancement of Garment Prototyping Processes for the Active Sportswear Sector by Means of Virtual 3D Simulations

Duration: December 2015 - December 2016

Funding: CTI project n°18124.1 PFES-ES - CHF 97,856 (total budget) and CHF 47,960 (Artanim's budget)

Main applicant / Coordinator: Prof. Christiane Luble, Geneva University of Art and Design

Description: Enhancement of sports garment prototyping by means of virtual 3D simulations.

Partners: Geneva University of Art and Design, [Artanim Foundation](#), Odlo International SA

Motion and Unconsciousness

Duration: January 2013 - December 2016

Funding: Agalma Foundation - Approx. CHF 310,000 (total budget) and CHF 230,000 (Artanim's budget)

Coordinators: Prof. François Ansermet, University Hospitals of Geneva and Prof. Pierre Magistretti, Brain Mind Institute – EPFL

Description: Study of behavioral correlates on the subjective sensation of synchrony using motion capture, respiration measurements and EEG.

Partners: Agalma Foundation, [Artanim Foundation](#), University Hospitals of Geneva – Service of Child and Adolescent Psychiatry, Department of Child and Adolescent, Brain Mind Institute – EPFL

ArthroPlanner

Duration: November 2014 - October 2016

Funding: Private - CHF 290,000

Main applicant / Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Development of dynamic surgical planning solutions for the hip, shoulder and knee.

Shoulder Instability

Duration: August 2014 - July 2016

Funding: FORE Foundation / La Tour Hospital - CHF 40,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Kinematic study of glenohumeral anterior instability before and after surgical treatment.

Partners: [Artanim Foundation](#), La Tour Hospital – Division of Orthopedic and Trauma Surgery, Rive Droite Radiology Center SA

Fashioning Movement

Duration: November 2013 - October 2015

Funding: HES-SO - CHF 152,000 (total budget) and CHF 44,000 (Artanim's budget)

Main applicant / Coordinator: Prof. Christiane Luible, Geneva University of Art and Design

Description: Objective analysis of garment comfort using 3D simulation tools on animated bodies.

Partners: Geneva University of Art and Design, [Artanim Foundation](#)

To Fit

Duration: June 2014 - April 2015

Funding: ToFit Sàrl - CHF 40,000

Coordinator: Sylvain Chagué, Artanim Foundation

Description: Development of a complete 3D body and head scanning solution.

Partners: [Artanim Foundation](#), ToFit Sàrl

Shoulder Rehabilitation

Duration: April 2014 - December 2014

Funding: University Hospitals of Geneva - CHF 16,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Impact of strengthening shoulder exercises on the glenohumeral joint and rotator cuff.

Partners: [Artanim Foundation](#), University Hospitals of Geneva – Department of Orthopedic Surgery and Traumatology, Unit of Physical Medicine and Orthopedic Rehabilitation

Thoracic Outlet Syndrome

Duration: March 2014 - December 2014

Funding: FORE Foundation / La Tour Hospital - CHF 16,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Kinematic study of the thoracic outlet syndrome, a rare condition involving nerves compression in the costoclavicular area.

Partners: [Artanim Foundation](#), La Tour Hospital – Division of Orthopedic and Trauma Surgery, Rive Droite Radiology Center SA

Taylormatic

Duration: December 2012 - October 2014

Funding: NoBrandSolution Sàrl - CHF 187,000

Coordinator: Sylvain Chagué, Artanim Foundation

Description: Development of a virtual mirror and an interactive cross-platform retail solution, including a high quality 3D product viewer and configurator.

Partners: [Artanim Foundation](#), NoBrandSolution Sàrl

Shouder3D – Kinematic Modeling of the Human Shoulder

Duration: June 2012 - March 2014

Funding: La Tour Hospital, European Society of Shoulder and Elbow Surgery - CHF 125,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Development of a new kinematic model of the shoulder complex coupling magnetic resonance imaging (MRI) and motion capture.

Partners: [Artanim Foundation](#), La Tour Hospital – Division of Orthopedic and Trauma Surgery, Rive Droite Radiology Center SA

MyHip – Patient-Specific Pre-operative Planning and Intra-operative Surgical Guidance for Total Hip Arthroplasty

Duration: February 2012 - January 2014

Funding: CTI project n°13573.1 PFFLE-LS - CHF 274,760 (total budget) and CHF 118,000 (Artanim's budget)

Main applicant / Coordinator: Prof. Jérôme Schmid, Geneva Health School (HEdS)

Description: Development of a dynamic simulation module based on motion capture and integrated to the preoperative planning of total hip arthroplasty.

Partners: Geneva Health School (HEdS), [Artanim Foundation](#), University Hospitals of Geneva – Department of Orthopedic Surgery and Traumatology, Medacta International SA

Sexual Activity after Total Hip Arthroplasty: A Motion Capture Study

Duration: January 2013 - April 2013

Funding: Artanim Foundation

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Study of the relative risks of sexual activity in patients implanted with hip prosthesis.

Partners: [Artanim Foundation](#), University Hospitals of Geneva – Department of Orthopedic Surgery and Traumatology, Medacta International SA

7. OTHER FUNDED PROJECTS

3D animations, films, video games

- Motion capture for the virtual dance piece "VR_I", Cie Gilles Jobin, May 2017.
- Motion capture for a short animated film at the exhibition "Niklaus Manuel and the Reformation Period", Historical Museum of Bern, November 2016.
- Motion capture for a video fiction "The Next Round", Quentin Lannes, June 2016.
- Motion capture for a contemporary dance performance "Força Forte", Cie Gilles Jobin, September 2015.
- Téo & Léonie Trailer, Kenzan, February 2015.
- Short 3D animations for Gexfix, January 2015.
- Motion capture and animation for a mobile video game, Pom Pom Interactive, September 2014.
- Short 3D animation of winter sports, Olympic Games Sochi 2014, Sochi, February 2014.

Interactive installations

- "Wake up and dream", WVR17, Crans Montana, May 10th-14th 2017.
- "Inside Real Virtuality", Swissnex, Bangalore and Mumbai, January 14th-21st 2017.
- *In collaboration with the Cie Gilles Jobin:* "VR_I", Experimenta 2016, Grenoble, October 5th-8th 2016.
- "Real Virtuality", Cannes Festival 2016, Cannes, May 11th-14th 2016.
- "Real Virtuality", FMX 2016, Stuttgart, April 26th-29th 2016.
- "Real Virtuality", Laval Virtual 2016, Laval, March 23rd-27th 2016.

- "Real Virtuality: Immersive Explorers", Lift 16, Geneva, February 11th-12th 2016.
- "Real Virtuality: Immersive Explorers", Sundance Film Festival New Frontier 2016, Park City, January 22nd-30th 2016.
- "Real Virtuality", Tous Ecrans Festival 2015, Geneva, November 6th-7st 2015.
- "Inside Real Virtuality", Swissnex, San Francisco, August 17th-21st 2015.
- "Montreux Jazz Video Jukebox", Montreux Jazz Festival 2015, Montreux, July 3rd- 18th 2015.
- "3D In Motion", Caprices Festival 2015, Crans-Montana, April 9th- 12th 2015.
- "Omega Light Tracking", Baselworld 2013, Basel, April 25th-May 2nd 2013.
- *In collaboration with the Geneva University of Art and Design and Trivial Mass Production: "Tissot Wrist Watch"*, Baselworld 2012, Basel, March 8-15th 2012.

Live performances

- Dance show "Star Wars", Grand Prix d'Horlogerie de Genève, Grand Théâtre de Genève, Geneva, November 19th 2011.
- *In collaboration with the MIRALab-team, the University Hospitals of Geneva and the Grand Théâtre de Genève: "La danse dans tous ses états"*, Centre Médical Universitaire, Geneva, June 13th 2009.

8. AWARDS

- **Winner of the 2016 Laval Virtual Award** in the category 3D Game and Entertainment for the VR platform "Real Virtuality", Laval Virtual 2016, Laval, 2016.
- **Finalist of the "Immersive Realities (VR/AR) contest"** awarding the best augmented/virtual reality experiences possible using today's technologies, SIGGRAPH 2015, Los Angeles, 2015.
- *In collaboration with La Tour Hospital and the Rive Droite Radiology Center SA: **Best Technical Paper Award*** for the paper entitled "*A Patient-Specific Measurement Technique to Model the Kinematics of the Shoulder in Tennis Players*", 14th Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery (CAOS), Milan, 2014.
- *In collaboration with the University Hospitals of Geneva and Medacta International SA: **Special distinction for the best discussion of the poster*** entitled "*Sexual Activity after Total Hip Arthroplasty: A Motion Capture Study*" ", 15th Annual Congress of the European Federation of National Associations of Orthopaedics and Traumatology (EFORT), London, 2014.
- *In collaboration with the University Hospitals of Geneva: **ISAKOS Achilles Orthopaedic Sports Medicine Research Award*** for the paper entitled "*Clinical and MRI Findings in Professional Dancers' Hip: A New Femoro-acetabular Impingement?*" ", 8th Annual Congress of the International Society of Arthroplasty, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS), Rio de Janeiro, 2011.
- *In collaboration with the MIRALab-team and the University Hospitals of Geneva: **Eurographics Medical 1st Prize*** for the paper entitled "*Virtual Hip Joint: from Computer Graphics to Computer-Assisted Diagnosis*", 30th Annual Conference of the European Association for Computer Graphics, Munich, 2009.
- **2009 Walthard Prize** from the University of Geneva. This prize is given to a student conducting with success a sport career and academic studies.

9. SOCIETIES

- International Society for Computer Aided Surgery (ISCAS)
- Eurographics

10. OFFICIAL FUNCTIONS

- **Member of the scientific advisory board, CbmsLAB, from 05.2017**
Member of the scientific advisory board of the Comprehensive Biomechanics Science Lab, University Hospitals of Geneva.
- **President, Virtual Switzerland Association, from 10.2016**
President of the National Thematic Network (NTN) *Virtual Environments Interaction and Simulation* that aims to be a catalyzer of innovation in the fields of immersive technologies and virtual environments simulation by promoting dialogue and knowledge exchange between academic and industrial Swiss players in the medtech, architecture & construction, manufacturing and tourism & culture sectors.
Network funded by the CTI, period 2017-2020, CHF 1,320,000.

11. TECHNICAL AND SCIENTIFIC FUNCTIONS

Member of scientific program committees

- 33rd International Conference on Biomechanics in Sports, 2015
- 3D Physiological Human Workshop, 2009
- 3D Physiological Human Workshop, 2008
- Research Networking Workshop 2008 in the context of NCCR CO-ME project

Reviewer for specialized journals or international conferences

- American Journal of Sports Medicine (IF: 4.3)
- Journal of Orthopedic Research (IF: 2.9)
- Journal of Biomechanics (IF: 2.7), Journal of Applied Biomechanics (IF: 0.9)
- International Conference in Sport Biomechanics 2015
- Medical Imaging Computing and Computer-Assisted Intervention (MICCAI) conference 2011

12. FUNDING / GRANTS

Funding

- 3'690'000 CHF in competitive third-party funding since 2011 (CTI, industry, public and private funds), see Sections 6 and 10 for details.

Grants

- *Hans Wilsdorf Foundation*, grant to participate to the 10th International Symposium on 3D Analysis of Human Movement, Amsterdam, October 2008.
- *Hans Wilsdorf Foundation*, research grant, years 2007-2009.

13. INVITED CONFERENCES

1. World VR Forum 2017, "From Research to State-of-the-art Entertainment", Crans Montana, May 12th 2017
2. MGM Center of Human Movement Science, "Combining motion capture and medical imaging to improve diagnosis and treatment of Osteoarticular Structures", Mumbai, January 20th 2017
3. National Center for Biological Sciences, "Inside Real Virtuality", Bangalore, January 16th 2017
4. Digital Health 2016, The Role of Digital Health in Early Diagnosis and Prevention, June 24th 2016
5. Cannes Festival 2016: "Beyond Cinema: the Swiss Digital Revolution", Cannes, May 13th 2016
6. Lift 16: "Enter the Anti-Disciplinary Space: A Life in Motion", Geneva, February 11th 2016

7. Sundance Film Festival 2016: Round table "Hacking your senses", Park City, January 23rd 2016
8. GameZFestival 2015: "Real Virtuality Multiplayer", Zürich, October 4th 2015
9. 33rd International Conference on Biomechanics in Sports: "Hip and dancing", Round table "Sport and security", University of Poitiers, Poitiers, June 30th 2015
10. 33rd International Conference on Biomechanics in Sports: "Patient-specific analysis of shoulder kinematics and impingement in tennis players", University of Poitiers, Poitiers, June 29th 2015
11. Annual Conference of the French Society of Orthopaedic and Trauma Surgery (SOFcot): "Hip and dancing", Round table "Sport and security", Palais des Congrès, Paris, November 15th 2012
12. Prophysics User Meeting: "Motion Capture at Artanim: from 3D Animation to Movement Science", Orthopedic Hospital of Speising, Vienna, September 29th 2012
13. Meeting Agalma - Between art, science et psychoanalysis: "Body and movement: between art, science et technology", Swiss Institute of Roma, September 6th 2012
14. Workshop Centre d'Expression Numérique et Corporelle (CENC) - Les rapports entre l'art numérique et l'art corporel: "Capture de mouvement en temps réel", Fonderie Kugler, March 10th 2012
15. VIEW Conference 2011: "Using Motion Capture to Improve Analysis and Diagnosis of Joint Disorders", Torino, October 18th 2011
16. Annual Congress of the Swiss Orthopedic and Traumatology Society (SSOT): "Extreme Hip Motion in Professional Ballet Dancers", Lausanne, June 24th 2011
17. Lift 11: "From Ballet Dancing to 3D Hip Simulation", Geneva, February 4th 2011
18. European Federation of National Associations of Orthopaedics and Traumatology (EFFORT) meeting: "Professional Dancer's Hip: A Motion Capture Study", HUG, October 22nd 2010
19. European Society of Sports Traumatology, Knee Surgery & Arthroscopy (ESSKA) meeting: "Professional Dancer's Hip: A Motion Capture Study", HUG, June 1st 2010
20. Workshop on Semantic User Descriptions and their Influence on 3D Graphics and VR: "A Semantic-Driven Platform for Medical Applications", EPFL, November 13th 2008

14. CONGRESSES

1. 33rd International Conference on Biomechanics in Sports: "Impact of Strengthening Exercises on the Shoulder Joint", University of Poitiers, Poitiers, June 30th 2015
2. Annual Conference of Computer Assisted Radiology and Surgery (CARS) 2015: "A Simplified Tehcnique to Estimate Rotator Cuff Elongation during Complex Shoulder Motion", Barcelona, June 27th 2015
3. Annual Congress of the French-speaking Society on Motion Analysis in Children and Adults (SOFAMEA): "Sexual Activity after Total Hip Arthroplasty (THA)", Geneva, February 6th 2015
4. International Symposium on 3D Analysis of Human Movement: "Analysis of Shoulder Impingement and Stability in Tennis Players", Lausanne, July 16th 2014
5. Annual Conference of the Swiss Orthopedic and Traumatology Society (SSOT): "Post-operative Kinematics Assessment in Patients after Total Hip Arthroplasty: A Pilot Study", St-Gallen, June 27th 2014
6. Annual Conference of the Swiss Orthopedic and Traumatology Society (SSOT): "Risk Assessment of Sexual Activity after Total Hip Arthroplasty (THA)", St-Gallen, June 27th 2014
7. Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery (CAOS): "A Patient-Specific Measurement Technique to Model the Kinematics of the Shoulder in Tennis Players", Milan, June 20th 2014
8. Annual Congress of the European Federation of National Associations of Orthopaedics and Traumatology (EFORT): "Sexual Activity after Total Hip Arthroplasty: A Motion Capture Study", London, June 5th 2014
9. Annual Conference of the International Society for Technology in Arthroplasty (ISTA): "Using Motion Capture and MRI to Accurately Determine the Hip Range of Motion in Everyday Life", Palm Beach, October 19th 2013

10. Annual Conference of the International Society for Technology in Arthroplasty (ISTA): "Congruence and Impingement in Total Hip Arthroplasty during Everyday Tasks", Palm Beach, October 19th 2013
11. Annual Conference of the Swiss Orthopedic and Traumatology Society (SSOT): "Assessment of Congruence and Impingement of Prosthetic Hips during Everyday Tasks", Lausanne, June 28th 2013
12. Annual Conference of Computer Assisted Radiology and Surgery (CARS) 2010: "An Integrated Platform for Hip Joint Osteoarthritis Analysis: Design, Implementation and Results", Geneva, June 24th 2010
13. Annual Conference of the Orthopaedic Research Society (ORS): "Professional Dancer's Hip: A Motion Capture Study", New Orleans, January 28th 2010
14. Annual Conference of the Swiss Orthopedic and Traumatology Society (SSOT) : "Extreme Motion as a Potential Initiator of Hip Osteoarthritis", Geneva, June 25th 2009
15. Eurographics 2009: "Virtual Hip Joint: from Computer Graphics to Computer-Assisted Diagnosis", Munich, April 1st 2009
16. 3D Physiological Human Workshop: "Motion Study of the Hip Joint in Extreme Postures", Zermatt, December 4th 2008
17. International Symposium on 3D Analysis of Human Movement: "Analysis of Extreme Hip Motion in Professional Ballet Dancers", Amsterdam, October 15th 2008
18. Surgetica'2007 : "A Semantic-Driven Clinical Examination Platform", Chambéry, September 17th 2007

15. SEMINARS

1. Master seminar in computer science: "Research at Artanim : from medicine to virtual reality", University of Geneva, Geneva, November 28th 2016
2. Master seminar in computer science: "Research at Artanim : from medicine to virtual reality", University of Geneva, Geneva, Avril 4th 2016
3. Agalma's internal research seminar: "Introduction to Motion Capture and Applications", Agalma Foundation, Geneva, May 3rd 2015

16. WORKSHOPS / EVENTS ORGANISATION

1. "Le regard de Narcisse : la perception, le miroir et la mort", Le Cénacle, Geneva, November 15th 2013, seminar organizer
2. "Warburg seminar : between neuroscience, art and psychoanalysis", New York Psychoanalytic Institute, New York, October 12-13th 2013, seminar organizer
3. "Ferdinand de Saussure : entre neurosciences, psychanalyse et sémiologie", Le Cénacle, Geneva, October 3rd 2013, seminar organizer
4. Workshop: "Rencontre Agalma : Arts, sciences et psychanalyse", Institut Suisse de Rome, September 6-7th 2012, workshop organizer
5. The Freudian Unconscious: Between Neuroscience and Psychoanalysis, EPFL, October 28-29th 2011, workshop organizer
6. Swiss and International Alpine and Nordic University Skiing Championships (U-Games 2010), Vevey, March 6-14th 2010, IT manager
7. 3D Physiological Human Workshop, Zermatt, November 28th - December 4th 2009, local committee co-chair
8. Swiss and International Alpine and Nordic University Skiing Championships (U-Games 2009), Vevey, March 11-15th 2009, IT manager
9. 3D Physiological Human Workshop, Zermatt, December 1-4th 2008, local committee co-chair
10. Research Networking Workshop'08 (CO-ME), Zermatt, August 5-7th 2008, workshop chair

17. MEDIA

Press articles

1. Wenn das Kinoerlebnis zum Trip wird, May 2017, NZZ am Sonntag
2. D'Artanim à Dreamscape Immersive: Des chercheurs genevois sur les chemins de la réussite, March 2017, Fédération des Entreprises Romandes
3. Dreamscape tape dans l'oeil de Spielberg, February 2017, Tribune de Genève
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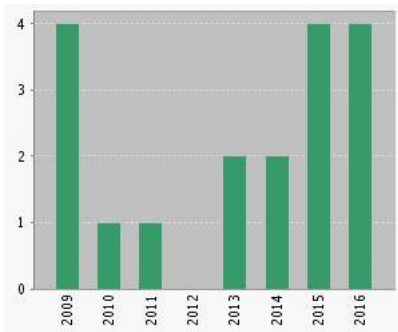
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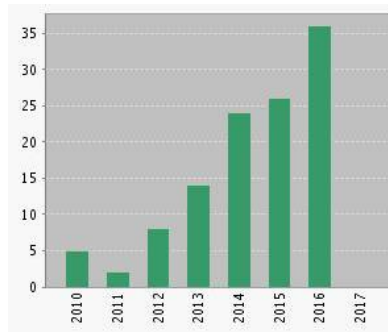
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