Nadine Abu Rumman

Lecturer, Computer Science Department - Brunel University London

EDUCATION

PH.D. IN COMPUTING SCIENCE AND ENGINEERING
2012-2016 |Sapienza University of Rome, Italy

M.SC. IN COMPUTER SCIENCE
2008-2010|Al Balqa' Applied University, Jordan
GPA: 3.88/ 4.0

B.SC. IN COMPUTER SCIENCE
2003-2007|Princess Sumaya University for Technology, Jordan
GPA:82.4/100

LINKS

Github:// **NadineAB**
LinkedIn:// **NadineLinkedIn**
Vimeo:// **RummanVimeo**
Researchgate:// **RummanResearchgate**

COURSEWORK

Computer Vision
Machine Learning
Vision and Perception
Pattern Recognition
Visual Learning: Recognition

SKILLS

Operating Systems:
• Mac OSX •Windows • Linux
Programming Languages:
• C/C++ • MEL • Python • Java • HTML
• ASP.NET • JavaScript • Matlab
Graphics and Visualization Toolkits:
•Qt •OpenGL • OpenCV • Bullet
Professional Tools:
• Autodesk Maya •Adobe Premiere •
Adobe Flash • ParaView • Adobe
Photoshop • Adobe Illustrator • LaTeX
Soft Skills:
• Team player •Self-motivated • Creative
• Enthusiastic learner •Problem solver

RESEARCH EXPERIENCE

UNIVERSITY COLLEGE LONDON | RESEARCH ASSOCIATE
Dec 2018 – Now | London, UK
- Nonverbal Social Communication: Real-time face-to-face social conversation involves complex coordination of nonverbal cues such as head movement (nodding), gaze (i.e. eye contact), facial expressions and gestures.

COMPUTER SCIENCE RESEARCH INSTITUTE OF TOULOUSE | POSTDOCTORAL RESEARCHER
Feb 2017 – Now | Toulouse, France

- Muscle Deformations for Implicit Skinning: We are developing controllable muscle deformations for character animation for interactive applications.

FRIEDRICH-ALEXANDER UNIVERSITY | POSTDOCTORAL RESEARCHER
Mar 2016 – Jan 2017 | Erlangen, Germany
- Coupled simulation of deformable bodies and fluids: We investigate a simple yet stable method for simulating various elastic and fluid phenomena.

ICUBE LAB, UNIVERSITY OF STRASBOURG | VISITING SCHOLAR
Mar 2015 – Jun 2015 | Strasbourg, France
- Contact handling: We studied the possibility to obtain real-time responses with accurate edge/edge collision detection.

SELECTED PUBLICATIONS

- **Aburumman, N.**, Nair, P., Mueller, P., Barthe, L., Vanderhaeghe, **ISPH-PBD: Coupled Simulation of Incompressible Fluids and Deformable Bodies**, The Visual Computer journal, 36(5), 893-910, **2020**.

- Casti, S., Livesu, M., Mellado, N., **Aburumman, N.**, Scateni, R., Barthe, L., Puppo, E., **Skeleton Based Cage Generation Guided by Harmonic Fields**, Computers & Graphics journal, Volume 81, June 2019, 140-151, **2019**.

- Roussellet, V., **Aburumman, N.**, Canezin, F., Mellado, N., Barthe, L., Kavan, L., **Dynamic Implicit Muscles for Character Skinning**, Computers & Graphics journal, 77: 227-239, December **2018**.

- Abu Rumman, N. and Fratarcangeli, M., **Position-Based Skinning for Soft Articulated Characters**. Computer Graphics Forum, 34: 240–250, September **2015**. doi: 10.1111/cgf.12533

- Rumman N.A., and Fratarcangeli M., **Position Based Skinning of Skeleton-driven Deformable Characters**, in Proceedings of the 30th Spring Conference on Computer Graphics. , pp. 83-90. ACM. **2014**. doi: 10.1145/2643188.2643194 (Best paper award and Best presentation award)

COLLABORATION WITH INDUSTRIAL PARTNERS

- **Elastic Implicit Skinning for Character Animation:** Transfer technology supported by Toulouse Tech Transfer (TTT) – for the program description (*click here*)

AWARDS

2017	CIMI Postdoctoral Fellowship Grant
30, May 2014	Best paper and Best presentation awards at SCCG2014
2012	Doctoral Scholarship from EU Avempace Erasmus Mundus Project