

Roy Shilkrot

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EDUCATION

Doctor of Philosophy (PhD), Media Arts and Sciences
Media Lab, Massachusetts Institute of Technology
Expected, June 2015

Master of Science (M.Sc.), Computer Science
Tel-Aviv University, Tel-Aviv, Israel
June 2010
THESIS in Computer Graphics: Garment Personalization via Identity Transfer

Bachelor of Science (B.Sc.), Computer Science
Tel-Aviv Yaffo College, Tel-Aviv, Israel
June 2007

PROFESSIONAL EXPERIENCE

MIT Media Lab, Cambridge, MA September 2010 – Today
Research Assistant and PhD Candidate

- Researching novel user interfaces, under the supervision of Prof. Patricia Maes.
- Close contact with leading companies in industry, showcasing my work both frontally and through other forms of media.
- My work resulted in one co-authored book, numerous conference and journal research papers and many references in popular media.

Microsoft Research, Redmond, WA June – September 2012
Research Intern

- Developed a wearable augmented reality interface for gaming.
- Developed a RGB+D tracking and positioning system for multi-room AR gaming. Presented the results before the heads of research in imaging and graphics in MSR.

Tel-Aviv University, Tel-Aviv, Israel May – September 2010
Graduate researcher

- Developed a research project that led to a Master of Science in Comp. Sci. and a journal paper (IEEE), under the supervision of Prof. Daniel Cohen-Or and Prof. Ariel Shamir.

Comverse Network Systems, Tel-Aviv, Israel 2006 – 2010
Senior Engineer, Technology Strategist

- Innovation Labs, marketing department: Developed novel mobile and cross-device interfaces. Patented and presented my work before company heads.
- IP-TV department: Developed TV-UI, applications and mobile device convergence. My work was deployed with 2 major IPTV clients in Greece and Andorra.
- Voice, Video & Media group: Developed applications over 3G services.
- Personally presented my work in international trade shows such as MWC Barcelona and client-facing company conferences.

Netomedia, Tel-Aviv, Israel

2003 – 2006

Software Developer

- Developed web interfaces, web spiders (including smart automatic form submission capabilities) and a content generation system. My work was deployed live in hundreds of the company websites.

Israeli Defence Forces, Intelligence Corps, Israel

2000 – 2003

Intelligence Analyst (ranked Sergeant First Class)

- Analyzing and researching terrorist groups, developing supporting web applications.
- My work resulted in numerous terrorist prevention alarms in settlements, major cities and army bases in Israel, and provided a research framework for future analysis.

PUBLICATIONS

- Augmented Airbrush for Computer Aided Painting (CAP). **Roy Shilkrot**, Pattie Maes, Joseph Paradiso, Amit Zoran. *To appear in* Transaction on Graphics (TOG), ACM 2014.
- nARratives of augmented worlds. **Roy Shilkrot**, Nick Montfort, Pattie Maes. In Proceedings of the Intl' symposium on Mixed and Augmented Reality (ISMAR), IEEE 2014.
- Physical Rendering with a Digital Airbrush. **Roy Shilkrot**, Pattie Maes, Amit Zoran. In SIGGRAPH, Emerging Technologies track, ACM 2014.
- FingerReader: A Wearable Device to Support Text-Reading on the Go. **Roy Shilkrot**, Jochen Huber, Connie K. Liu, Pattie Maes and Suranga Nanayakkara. In Proceedings of CHI '14 Extended Abstracts on Human Factors in Computing Systems (CHI EA '14), ACM 2014.
- Workshop on Assistive Augmentation. Jochen Huber, Jun Rekimoto, Masahiko Inami, **Roy Shilkrot**, Pattie Maes, Meng Ee Wong, Graham Pullin and Suranga Nanayakkara. Proceedings of CHI '14 Extended Abstracts on Human Factors in Computing Systems (CHI EA '14). ACM 2014.
- The Hybrid Artisans: A Case Study in Smart Tools. Amit Zoran, **Roy Shilkrot**, Suranga Nanayakkara and Joseph Paradiso. In Transactions on Computer-Human Interaction (ToCHI). ACM 2014
- The Wise Chisel: The Rise of the Smart Handheld Tool. Amit Zoran *, **Roy Shilkrot** *, Pragun Goyal, Pattie Maes and Joseph Paradiso. To appear in Pervasive Computing, Special Issue - Fabrication and Printing for Pervasive Computing. IEEE 2014 (* equal contribution)
- Human-computer interaction for hybrid carving. Amit Zoran, **Roy Shilkrot**, Joseph Paradiso, In the proceedings of the 26th Symposium on User Interface Software and Technology (UIST), ACM 2013.
- EyeRing: A Finger Worn Input Device for Seamless Interactions with our Surroundings. Suranga Nanayakkara, **Roy Shilkrot**, Kian Peen Yeo and Pattie Maes, in the proceedings of the 4th International Conference on Augmented Human, ACM 2013.
- Garment Personalization via Identity Transfer. **Roy Shilkrot**, Daniel Cohen-Or, Ariel Shamir, L.Liu. In the Journal of Computer Graphics and Applications, IEEE 2013
- Exploring Structure from Motion Using OpenCV. **Roy Shilkrot**, chapter from the book "Mastering OpenCV with Practical Computer Vision Projects", Packt publishing, 2012
- EyeRing: A Finger-worn Assitant. Suranga Nanayakkara, **Roy Shilkrot** and Pattie Maes. In proceedings of the Intl. Conf. Human Factors in Computing (CHI 2012), Work-In-Progress, ACM 2012.
- PoCoMo: Projected Collaboration using Mobile Devices. **Roy Shilkrot**, Seth hunter and Patricia Maes. In proceedings of the 13th International Conference on Human-Computer Interaction with Mobile Devices and Services (Mobile HCI 2011), ACM 2011.

HONORS

Full research assistantship, given by the Media Lab, Massachusetts Institute of Technology, 2010
Scholarship awarded for academic achievements in 2nd year, awarded by Tel-Aviv Yaffo College, 2006
Award of distinguished service, given once a year to a single soldier in the entire brigade, awarded by the Colonel Brigadier, 2003.

INTERESTS

Music (Bass, Guitar, Piano), Sailing, Skiing & Snowboarding, Surfing (Wind & Wave), Skating (Ice & In-line), Hiking, Short story writing, Languages