Alaa Azazi | CURRICULUM VITAE

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SUMMARY

- Research experience in inertial tracking, interactive surfaces, and multi-surface environments
- Teaching experience: teaching assistant (currently in 2 courses)
- Dean's List - Faculty of Science, AITF Master's Scholarship

EDUCATION

04/2016 (expected)

M.Sc., Computer Science, University of Calgary (Canada)
Department of Computer Science, ASE Group
Supervisor: Frank Maurer

04/2014

B.Sc., Computer Science, University of Calgary (Canada)
B.Sc., General Mathematics, University of Calgary (Canada)
Graduated with Distinction. Senior GPA 3.82/4.0
Honours thesis: *Evaluating Spatial Awareness in Multi-surface Environments*
Supervisor: Frank Maurer

04/2010

Diploma, Information Technology, Southern Alberta Institute of Tech. (Canada)
Graduated with distinction. GPA 4.0/4.0
Area of concentration: *Network Systems*

EMPLOYMENT

Since 01/2013

Research assistant at the ASE Group, University of Calgary (Canada)
Research, development, and evaluation of software systems in the areas of multi-surface environments and inertial tracking.
Supervisor: Frank Maurer

06/2014 - 09/2014

Visiting research student, Federal University of Sao Paulo (Brazil)
Analyzing usability metrics of medium fidelity prototypes.
Supervisor: Tiago da Silva

TEACHING EXPERIENCE

01/2015 - 04/2015

Teaching assistant SENG 301, Analysis and Design of Large-Scale Software I
Tutorials in the analysis of requirements, design, implementation, and testing of large-scale quality software.
(Coordinator: Theodore Hellman, 45 students)

01/2015 - 04/2015	**Teaching assistant MATH 249, Introductory Calculus**
	Tutorials in algebraic operations, functions, graphs, limits, derivatives, and integrals of exponential, logarithmic and trigonometric functions.
	(Coordinator: Danny Glin, 8 students)
09/2014 - 12/2014	**Teaching assistant MATH 265, University Calculus I**
	Tutorials in the calculus of exponential, logarithmic, trigonometric and inverse trigonometric functions.
	(Coordinator: Mohammed Aiffa, 28 students)
09/2014 - 04/2015	**Teaching assistant for Mathematics Continuous Tutorials**
	Tutorials and advice for first year Mathematics & Statistics students , covering fundamental Calculus and Linear Algebra classes.
01/2010 - 04/2010	**Lab assistant CMPN 365, Secure WANs & Optimizing Networks**
	Tutorials in authentication firewalls, device level security, protocol tunneling and QoS.
	(Instructor: Qi Gang Hu, 20 students)
09/2009 - 12/2009	**Lab assistant CMPN 314, Advanced Routing & Switching**
	Tutorials in configuring and integrating multiple internal and external routing protocols (e.g. OSPF, ISIS, EIGRP, BGP).
	(Instructor: Richard Fischer, 20 students)

RESEARCH INTERESTS

- **Design of spatially-aware multi-surface environments**
  see publications W.1, L.1
- **Indoor tracking using inertial measurement sensors**
  see publications T.1, EA.1, W.2
- **Gesture-based interfaces**
  see publications W.1, W.3, L.1
- **Supporting collaboration in multi-surface environments**
  see publications W.1, W.3, L.1

PUBLICATIONS

EXTENDED ABSTRACTS OF DEMONSTRATIONS, POSTERS, AND VIDEOS

[EA.1]   **Alaa Azazi**, Teddy Seyed, Frank Maurer. (2014) Investigating Inertial Measurement Units for Spatial Awareness in Multi-Surface Environments. In Proc. of the 2nd ACM Symposium on Spatial User Interaction - SUI 2014. (Honolulu, HI), October 4-5. Poster.

WORKSHOPS

[W.1]   **Alaa Azazi**, Teddy Seyed, Fadi Botros, Daniel Sabourin, Edwin Chan, Frank Maurer. (2013) Using Multiple Kinects to Build Larger Multi-Surface Environments. *In Proc. of the Workshop on Collaboration Meets Interactive Surfaces* in *ACM Interactive Tabletops and Surfaces – ITS'13*. (St Andrews, Scotland, UK).

[W.2]   **Alaa Azazi**, Teddy Seyed, Frank Maurer. (2014) From Room Instrumentation to Device Instrumentation: Assessing an Inertial Measurement Unit for Spatial Awareness. *In Proc. of*

the Workshop on Collaboration Meets Interactive Surfaces in *ACM Interactive Tabletops and Surfaces – ITS'14*. (Dresden, Germany).

[W.3] **Alaa Azazi**, Teddy Seyed, Frank Maurer. (2015) A Unified Model for Mapping Gestures to Tracking Sensors in Multi-Surface Environments. *In Proc. of the Workshop on Supporting "Local Remote" Collaboration* in *ACM Computer-Supported Cooperative Work – CSCW'15*. (Vancouver, Canada).

THESIS

[T.1] **Alaa Azazi**. (2014) Evaluating Inertial Measurement Units for Spatial Awareness in Multi-Surface Environments. Honours Thesis, University of Calgary, Faculty of Science, Department of Computer Science, Canada, April.

TUTORIALS

[L.1] *MSEAPI: Building Multi-Surface Environments*, NSERC SurfNet Annual General Meeting, Calgary, Alberta, Canada, 90 minutes, June 2013.

[L.2] *All Your Devices Belong to Us: Using the Society of Devices Toolkit to Create Multi-Surface Environments*, ACM Interactive Tabletops and Surfaces – ITS'14, Dresden, Germany, November 2014. (Industrial Demo).

SCHOLARSHIPS, AWARDS, AND HONORS

09/2014 - 04/2016 **Alberta Innovates Technology Futures, Master's Scholarship,** $26,500 p.a.
Computer Science Graduate Student Scholarship

09/2014 - 04/2016 **NSERC Surfnet Special Project Grant,** $25,000
Surfnet Strategic Research Network Grant

09/2014 - 04/2016 **Department Research Award,** $6,000 p.a.
Computer Science Graduate Student Scholarship

09/2014 - 04/2016 **International Recruitment Graduate Award,** $2,000 p.a.
International Graduate Student Scholarship

06/2014 - 09/2014 **Mitacs Globalink Research Award,** $5,000
for research visit at the Federal University of Sao Paulo

09/2008 - 04/2014 **Nexen Inc. Scholarship,** $40,000 p.a.
Nexen Inc. Undergraduate Student Scholarship

11/2013 **Lockhart Family Computer Science Award,** $1500
Faculty of Science Dean's List Award

11/2011 - 04/2013 **Alumni Association International Student Scholarship,** $2,200 p.a.

02/2013 **Microsoft Coding Contest**
Second place in the competition held at the University of Calgary

03/2010 **Cisco-ACCC Award of Excellence,** $1000

09/2009 **Cisco Net Riders Networking Competition US-Canada**
First place in Alberta and third in Canada

TECHNICAL SKILLS

DEVELOPMENT	Expert: Working Knowledge:	C++, C#, Objective-C, WPF, JAVA, and Node.js C, JavaScript, Unity, and SQL
SDKs	Microsoft Surface SDK, Microsoft Kinect SDK, ESRI ArcGIS SDK, Bing Maps	
NETWORKING	Strong knowledge of the TCP/IP stack, and TCP/UDP socket programming	

REFERENCES

Frank Maurer	Professor, Associate Vice-President (Research), Department of Computer Science Agile Surface Engineering Group, University of Calgary 2500 University Drive NW, Calgary, AB T2N 1N4, Canada Phone: +1 (403) 220-3531 Email: frank.maurer@ucalgary.ca
Thi Dinh	Professor, Assistant Dean (Student Affair), Department of Mathematics and Statistics University of Calgary 2500 University Drive NW, Calgary, AB T2N 1N4, Canada Phone: +1 (403) 220-2214 Email: tndinh@ucalgary.ca
Mohammed Aiffa	Instructor, Department of Mathematics and Statistics University of Calgary 2500 University Drive NW, Calgary, AB T2N 1N4, Canada Phone: +1 (403) 220-6313 Email: aiffam@ucalgary.ca
Theodore Hellman	Instructor, Department of Computer Science Agile Surface Engineering Group, University of Calgary 2500 University Drive NW, Calgary, AB T2N 1N4, Canada Phone: +1 (403) 667-2911 Email: tdhellma@ucalgary.ca
Teddy Seyed	PhD Candidate, Department of Computer Science Agile Surface Engineering Group, University of Calgary 2500 University Drive NW, Calgary, AB T2N 1N4, Canada Phone: +1 (403) 667-7597 Email: teddy.seyed@ucalgary.ca