

Contact Information:

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Education:

- ❖ **Ph.D.** in computer science: **University of Houston** 2011-present (**GPA: 3.93**)
 - ❖ **M.Sc.** in computer science: **Prairie View A&M University**, 2011 (**CPA: 4.0**)
 - ❖ **B.Sc.** in computer science: **JUST University**, Jordan, 2005
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Research Interests:

Affective Computing, Human-Computer Interaction, Parallel Computing, and Machine Learning

Research projects:

- ❖ **SubjectBook:** A web-based visualization tool for acquiring, visualizing and analyzing multimodal affective datasets. It consists of two main components: the back end, and front end. The back end was built using Play Framework-Scala, Java, and Akka concurrent library. The front end was built using Java Script, JQuery, HTML, and D3.js.
 - ❖ Investigating the cognitive and emotional loading during the developmental ages of children.
 - ❖ **VOLPEX:** An environment for running parallel applications on volatile nodes. My focus was on how to efficiently use fault-tolerant mechanisms such as checkpointing, and message-logging to reduce the time needed to recover from any failure (C, and C++).
 - ❖ Building a private cloud computing environment for high performance applications using Hadoop on Ubuntu.
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Professional Experience:

- ❖ **Research Assistant** CPL lab at UH (**Aug 2015-present**)
I am working on developing a visualization and data management tool, called SubjectBook, to acquire affective data in real-time manner and provide multilayer visualizations for such data.

- ❖ **Research Intern AT** (Schneider electric), Houston, TX (**Jun 2015 - Aug 2015, May 2014 – Aug. 2014**)
 - I was a member of a team working on **Cloud-based Operator Training Simulators (COTS)** project, a cloud-based system for training operators. My task was to use fault-tolerant techniques to ensure resilience to failures, and to improve system availability. This system was built using Scala, Akka, and Spray toolkit.
 - ❖ **Teaching Assistant AT** University of Houston, Houston, TX **Jan. 2012 – May 2015**
 - Introduction to Computer Science I (COSC 1410, UH) spring, 2015
 - Introduction to Computer Science I (COSC 1410, UH) fall, 2014
 - Introduction to Computer Science II (COSC 1320, UH) spring, 2014
 - Introduction to Computer Science I (COSC 1410, UH) fall, 2013
 - Programming in C (COSC 1304, UH) spring, 2013
 - Computer Architecture (COSC 3330, UH) fall, 2012
 - High Performance Computing (COSC 6365, UH) spring, 2012
 - ❖ **Teaching Assistant AT** PVAM University, Houston, TX **Jan. 2010 – May 2011**
 - Computer Science II (COMP1223, PVAMU) spring, 2010 fall and spring, 2011
 - ❖ **Database Developer AT** Hashemite University- Jordan: **Nov. 2006 – Sep 2009**
 - My responsibilities included: Designing, developing, and maintaining new and existing databases and their applications.
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Publications:

- **(Impact factor: 5.2)** I. Pavlidis¹, M. Dcosta¹ , **S. Taamneh** , M. Manser, T. Ferris, R. Wunderlich, E. Akleman , P. Tsiamyrtzis. “Dissecting Driver Behaviors under Cognitive, Emotional, Sensorimotor, and Mixed Stressors”. *Sci. Rep.* **6** (2016), doi: [10.1038/srep25651](https://doi.org/10.1038/srep25651).
- **(Impact factor: 1.04)** M. Taamneh, **S. Taamneh**, and S. Alkheder. "Clustering-based classification of road traffic accidents using hierarchical clustering and artificial neural networks." *International Journal of Injury Control and Safety Promotion* (2016): 1-8, doi: [10.1080/17457300.2016.1224902](https://doi.org/10.1080/17457300.2016.1224902).
- **(Acceptance Rate: 20%)** **S. Taamneh**, M. Dcosta, K. Kwon, and I. Pavlidis. “SubjectBook: Hypothesis-Driven Ubiquitous Visualization for Affective Studies”. *CHI'16 Extended Abstracts on Human Factors in Computing Systems*, San Jose, California, May 7-12, 2016, doi: [10.1145/2851581.2892338](https://doi.org/10.1145/2851581.2892338).

- **(Impact Factor: 0.93)** A. Alkhder, M. Taamneh, and **S. Taamneh** "Severity Prediction of Traffic Accident Using Artificial Neural Network." *Journal of Forecasting* (2016), doi: [10.1002/for.2425](https://doi.org/10.1002/for.2425).
- **(Impact Factor: 0.43)** M. Taamneh, A. Alkhder, and **S. Taamneh** "Data Mining Techniques for Traffic Accident Modeling and Prediction in the United Arab Emirates." *Journal of Transportation Safety & Security*, just-accepted (2016), doi: [10.1080/19439962.2016.1152338](https://doi.org/10.1080/19439962.2016.1152338).
- **S. Taamneh**, M. Dcosta, K. Kwon and I. Pavlidis "SubjectBook: Web-based Visualization of Multimodal Affective Datasets Residing on the Cloud", *The Society for Affective Science Conference, SAS 2016*, Chicago, IL, USA.
- **S. Taamneh**, D. Shastri, D. Currie, M. Dcosta, and I. Pavlidis; "What Sympathetic Responses Can Tell about Children's Performance in Reading?" *The Society for Affective Science Conferences*, 9-14 April 2015, San Francisco, CA.
- Y. Lu, **S. Taamneh** and J. Ashley, "Implementation of Genetic K-means Algorithm on Iterative MapReduce Framework for Clustering Gene Expression Data", *the proceedings of 25th International Conference on Computer Applications in Industry and Engineering (CAINE-2012)*, New Orleans, USA, November 14-16, 2012

Awards:

- Best Poster Presentation, UHCS PHD showcase 2014:
<http://cspthshowcase.nsm.uh.edu/previous/2014/awards>
- Poster Award, 2nd STEAM Research Symposium, Prairie View A&M University, March, 2011: "Building a private cloud computing environment for high performance applications"

Coursera certificates:

- Principles of Reactive Programming([Link](#))

Technical Training:

Oracle Application Server 10g Workshop: may, 2009. Hashemite University, Jordan.

Oracle Sql tuning workshop: May, 2008. Hashemite University, Jordan.

Oracle Portal workshop: May, 2008. Hashemite University, Jordan.

Computer Skills:

Programming Languages: C, C++, Java, Scala, VB.Net, and C#.Net

Web Programming: HTML, CSS, Java Script, JQuery, Play Framework, ASP.Net MVC.

Network Programming: TCP/IP and UDP

Web services: Spray.io on top of Scala and Akka

Web API: Google Drive API, Google Charts API

Conncurent and distributed programming: Akka, MPI, OpenMP, and POSIX

Database: Sql, Oracle, Mysql, MS SQL server, and Cassandra.

Statistical analysis software: Matlab, and R

Graphics tools: Gnuplot, Adobe Illustraror, GIMP, and Adobe Photoshop.

Operating Systems: Microsoft, and Unix/Lunix systems

Office software: MS Word, MS Excel, and MS Powerpoint

References:

Dr. Ioannis Pavlidis

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Johan Prinsloo

Title: Senior Principal Software Engineer at Schneider Electric

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