

Bardia Aghabeigi

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INTERESTS

Interests: HCI User Research, and Experimental Design, Predictive Analytics, Data mining, and Visual Analytics for HCI data. Business Intelligence Solutions, Social Games Analytics and Design, Software Development.

EDUCATION

Simon Fraser University, British Columbia, Canada

Msc in Interactive Art and Technology

February 2011

Computer Science major with additional courses in User Research and Game Design

Thesis: Understanding and Evaluation of Cooperative Video Games

Graduate Coursework: 1.Advanced Algorithms 2.Parallel Data Processing Map-Reduce 3.Machine Learning 4.Empirical Research Methods and Statistics 5.Quantitative Methods 6.Social Computing 7.Game Design.

Iran University of Science and Technology, Tehran, Iran

Bsc in Software Engineering

May 2006

Thesis : A Soccer Middle Size Simulator Based on USARSIM and Development of Proper Agents

EMPLOYMENT

Software Developer & Researcher at Northeastern University, Game User Research Lab.

September 2012 - Current

- Developed business intelligence solution for IgnitePlay using Jaspersoft and PostgreSQL (<http://www.igniteplay.com>)
- Developed social game metrics and visual analytics to help production cycle in IgnitePlay.
- Prepared a framework for correlational and experimental studies in IgnitePlay(A/B testing).
- Worked on adaptive game contents based on emotional data.

Software Developer & Researcher at Blackbird Interactive Inc.

Oct 2011 - Sep 2012

- Developed ETL architecture to collect and transform Game telemetry data using PHP services, Nginx, Amazon S3, and Linux platform.
- Developed business intelligence solution using Jaspersoft technology and Infobright database systems.
- Developed Game metrics for a social game named [Hardware](#) to address design, production, and marketing questions (<http://blackbirdinteractive.com>).
- Developed interactive visual analytics such as Heatmaps and FlowMaps to answer design questions regarding player progress and game resource consumption using D3.js and Google Charts API.
- Developed Predictive Analytics models to predict game economy variables using different linear and non-linear regression techniques.

University Intern at Electronic Arts (Canada, Burnaby)

Mar 2011 - Oct 2011

- Working as game user researcher on NBA, and Dragon Age Origins Titles.
- Developed visual analytic system which outlines and matches results from experiment with Eye tracking data accompanied with game telemetry and Bio-feedback signals in NBA title.
- Developed Pattern mining algorithms to finding in-game behavioral patterns that lead to players' frustration using rule mining and general sequence mining and clustering algorithms. (Dragon Age Origins)

Software Developer and Game Designer at [ACE3DEX](#) Contract(Canada) Nov 2010 - Mar 2011

- Developed and designed an iOS published game named [ACE-Hockey](#), using [Unity](#) game engine.

Software Developer and Game Designer at [Carmaworks](#) (USA, Seattle) Jun 2010 - Nov 2010

- Developed and designed an iOS published music game named "[Voltan Adventures](#)", using [Cocos2d-iPhone](#) game engine and [Fmod](#) sound engine.

University Intern at Bardel Entertainments Inc (Canada, Vancouver) Feb 2010 - Jun 2010

- Developed business intelligence solution for [Tokiworld](#) game data using [Jasperreport](#) technology and MySQL.

MITACS Intern at Bardel Entertainments Inc

Feb 2009 - Jun 2009

- Conducted several user studies to investigate successful design framework for developing Cooperative games, for younger audience,
- Developed a prototype game using Flash and Action script, to show different design possibilities.

Software Developer at System Group, Inc., Tehran ,Iran

Jun 2005 – Aug 2007

- Developed reporting system based on [Jasperreport](#) technology, Weblogic server, and Oracle database, for Linux and Windows platforms.
- Developed client side and server side libraries and tools, either for build integration, or end user content uploading.

SKILLS

Language : Fluent in English,

Computer Skills :

- Languages: Java ,C++. C#, Python, Matlab, JavaScript, Action Script, PHP.
- Operating Systems: Windows, Mac, Linux
- Databases: Oracle, Microsoft SQL server, MySQL, Infobright, PostgreSQL
- Cloud Computing: Hadoop, Hive, AWS, and Microsoft Azure
- Game Engines : Unity, UDK, XNA, Cocos2d for iPhone.
- Mathematics and Engineering: Matlab, Simulink,

Data Mining and Stats Software:

- Matlab : Statistical toolbox, Shogun-toolbox
- Weka – Both GUI interface, and low level code development.
- RapidMiner : Rule mining and Sequential pattern mining
- R Stats Package
- IBM SPSS
- Hadoop , Amazon Elastic Reduce Map, Mahout Library

Visual Analytic Software:

- Jasper Report, IReport, Jasper Server
- Tableau
- D3.js library and HTML5 (for interactive Visualization)
- Google Charts API

Volunteer Experience :

- Volunteer: GDC 2010, Vancouver, MIGS 2010 Montreal, GDC 2009 Vancouver, Game Global Jam 2009 Vancouver, Simon Fraser Graduate representative 2009, Simon Fraser Graduate Sustainability Group 2010. Computational Aesthetics 2011

PUBLICATIONS

- [Game Analytics: Maximizing the Value of Player Data](#), (Book Chapter),Springer 2013, “Visual Analytics tools – a lens into player’s temporal progression and behavior “ (**Electronic Arts Inc**)
- [Game Analytics: Maximizing the Value of Player Data](#), (Book Chapter),Springer 2013,” Game Metrics based on Error Measures: A deeper look into your players’ behaviors “ (**Simon Fraser University – Ubisoft Inc**)
- IGIC 2012, (IEEE) Assistive Design and Production in Computer Games: Parametric Systems, Data Mining, Visual Analytic (**Blackbird Interactive Inc**)
- GHC 2010 The Effect of Age, Gender, and Previous Gaming Experience on Customization activities within games (**Bardel Entertainments Inc**)
- CHI 2010 Understanding and Evaluating Cooperative Games (**Bardel Entertainments Inc**)
- Futureplay 2010 User Studies - A Strategy towards a Successful Industry-Academic Relationship (**Bardel Entertainments Inc**)

