Email: jacobkjoseph@gmail.com

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Jacob Kalakal Joseph

Artificial Intelligence, Machine Learning, Game Theory
Multi-agent Systems, Web Search Engines, Python, Java, Android, Git

Education

University of Southern California   Los Angeles, USA
Master of Science in Computer Science (Emphasis in AI)   Jan 2011 – Dec 2012

Courses: Artificial Intelligence, Software Multi-Agent Systems & Game Theory, Information Retrieval & Web Search Engines, Database Interoperability, Ontologies & Semantic Web, Geospatial Information Management & Spatial Databases, Analysis of Algorithms, Software Architectures, Web Technologies

Select projects (*an exhaustive list is available at jacobkjoseph.com*):
- Context Sensitive Lucene: context-sensitive search engine prototype using Apache Lucene (an open source information retrieval library) and Altervista Thesaurus (an ontology based web-service)
- Comrader: Android App to track Facebook friends' location and trajectory on Google Maps
- MasterMind: logical code breaker agent using Jess (a Java based rule engine)
- ImageDecryptor: Image Decryption using Genetic Algorithm techniques
- SGLS: Game Theory model for calculating optimal defender strategy with limited adversary surveillance using AMPL, Matlab, Java, HTML, JS
- Weather Teller: Android App to retrieve local weather information from Weather.com and post it on user's Facebook wall

Uttar Pradesh Technical University   Lucknow, India
Bachelor of Technology in Computer Science and Engineering   Jul 2003 – Jun 2007

Select courses: Algorithms, Data Structures, Operating Systems, Database Systems, Computer Networks, Software Architecture, Automata & Compiler Design, Computer Architecture, Computer Organization

Skills

- Language: Python, Java, C#, C/C++, UNIX Shell Script, MS Powershell 2.0, VBA, Perl
- Database: Oracle (with Spatial DB), MySQL, MS SQL
- Web: HTML, CSS, JS, JSON, XML
- Platforms: Windows, UNIX, Linux, Android
- Others: Eclipse, Android Studio, MS Visual Studio, Apache Lucene, Apache Tomcat, IIS, Google Maps API, Facebook Graph API

Experience

Intel Corporation (CCG AP Tablets Software)   Folsom, USA
Software Engineer   Jan 2013 – Present
- Collaborate with OEMs, ODMs, IBVs, ISVs and Intel architects to design and develop Intel Atom platform based tablets with state-of-the-art features and capabilities

Intel Corporation (MCG CTS AP Tablets Debug)   Folsom, USA
Software Engineer (Intern)   Jun 2012 – Dec 2012
- Developed PyAnvil based automation tools for Intel Atom-Windows8 platform [Python 2.7]
- Developed an Android app for Fuel Gauge debugging on Intel Atom based tablets [Android]
- Built and programmed a robot prototype to hold a stylus and perform touch tests on tablets [Lego Mindstorms NXT 2.0]
- Built and programmed a robot prototype to perform automated sensor stress tests on tablets [ArbotiX RoboController]

Intel Corporation (NTG – Operating System-directed Power Management)   Bangalore, India
Software Engineer (Consultant for Infosys Limited)   Sep 2010 – Dec 2010
- Proposed, designed and developed OATS – an automation tool used to validate the Power Management stack on Intel Atom-Android platform [Python 2.7]

Microsoft Corporation (Microsoft Windows Embedded Compact 7)   Hyderabad, India
Software Engineer (Consultant for Infosys Limited)   Sep 2009 – Aug 2010
- Validated WinCE 7.0 BSP for Freescale iMX233 (ARMv4) and iMX51 (ARM Cortex A8) platforms [Windows CE Test Kit]
- Developed an application to collect and parse test log files and export relevant information into spreadsheets for improved readability and efficient result analysis [C#]

Microsoft Corporation (Microsoft Deployment Toolkit 2010)   Hyderabad, India
Software Engineer (Consultant for Infosys Limited)   Apr 2008 – Aug 2009
- Developed test plans and test cases, setup test environments, executed manual and automated tests, analyzed results, provided limited debug and code fixes support
- Drafted test automation scripts [Windows PowerShell v2.0]