

21 E. Chestnut St.,
Unit 6C
Chicago IL, 60611

Phone : (773)236-7068
E-mail: mark.kedzierski@gmail.com
Website: <http://kedzie.github.io>

Marek Kedzierski

Overview	Season developer with 10+ years experience in application development. I have spent the past 5 years focused on Android development, beginning with my Google Play Store application 'VirtualBox Manager' which has 50K+ installs with 4+ star rating.
Education	2001-2005 University of Texas Austin, TX <i>B.A. Computer Sciences</i> <ul style="list-style-type: none">Completed CS370 Undergraduate Research & CS379H Honors Research Thesis with A's.
Professional experience	02/13-Present BTS Consulting Burr Ridge, IL <i>Android Developer</i> <ul style="list-style-type: none">Android development for custom tablet with OS modifications to support custom functionality.OS development to support custom SystemUI (status bar, navigation bar), window z-order, touch & drag event dispatching, keyboard display.Developing of custom views to match UI/UX specs, AIDL services for IPC, content providers.Native android development with NDK, including OpenGL ES 3Compilation of native 3rd party libraries, including zeromq, protobuf, for Android using NDK standalone toolchains with GNU Autotools.
	05/15-07/15 Isobar Chicago, IL <i>Android Developer</i> <ul style="list-style-type: none">Gigya RaaS social registration and login flows integrated with Livefyre chat on Android.Supported emoji's in chat by using Android Spannable API. Custom Emoji keyboard populated with image URL's from REST webservice.Shared element transitions between fragments following material design guidelines
	09/12-2/13 Yotimbe San Diego, CA <i>Android Developer</i> <ul style="list-style-type: none">Built video posting application powered by RESTful services and integrated with Facebook, Twitter, Youtube & PayPal. Supported tablets/phones, previous android API's, followed Android design guidelines.
	04/12-8/12 Chicago Tribune Chicago, IL <i>Senior Android Developer</i> <ul style="list-style-type: none">Developed android application for viewing news media
	06/11-2/12 HS2 Solutions Chicago, IL <i>Web Developer & Architect</i> <ul style="list-style-type: none">Implemented an insurance claim processing system based on (user-editable) business rules using JBoss RulesSupported authoring of rules by business users by developing domain model, DSL and rule templates and converting existing rule spreadsheets into decision tables. Rule storage via Guvnor backed by git repository.

	12/10-06/11 University of Chicago <i>Java/Python Engineer (workflow specialist)</i> <ul style="list-style-type: none"> Advised team on possible value & cost of integrating existing project with a business process/workflow engine and developed proof-of-concepts for workflow solutions 	Chicago, IL
	2/10-12/10 MK Consulting <i>President/Lead Developer</i> <ul style="list-style-type: none"> Finding my own clients, requirement gathering and full lifecycle development. Leveraged JBoss jBpm 4.x to automate business processes governing communications between vendors & potential clients for marketing companies. 	Chicago, IL
	8/09-12/09 NAVTEQ <i>J2EE Senior Architect</i> <ul style="list-style-type: none"> Developed security extensions to JBoss jBPM to support object & role based authorization conforming with Java security standards. 	Chicago, IL
	11/08-5/09 MIT Lincoln Laboratory <i>Software Engineer</i> <ul style="list-style-type: none"> Integrated applications, including those developed in C++ & Matlab, developed by other laboratory groups into a SOA architecture. Clients discovered services from UDDI registry. Applications communicated via Cursor-on-Target & CRD schemas for Situational Awareness & aircraft route/mission planning. Integrated with Falconview & NASA WorldWind. 	Boston, MA
	7/07-7/08 Pervasive Software, Inc. <i>J2EE Software Architect</i> <ul style="list-style-type: none"> Exposed existing proprietary technology to SaaS by building an ESB adding features such as High Availability, scalability, multi-tenancy, BPEL orchestration, JMX/SMNP monitoring, and content management. Lead the entire development life-cycle from requirements and release. Used J2EE 5 technologies including JBoss AS, EJB 3, JAX-WS, JMX, JBoss jBPM, Hibernate, BPEL (Apache ODE). Developed development tools as Eclipse Plugins. 	Austin, TX
	8/05-6/07 KiTS <i>Java Developer</i> <ul style="list-style-type: none"> J2EE Development of a SOA architecture using IBM WebSphere and Oracle. Daily experience developing Web Services, EJBs, Hibernate, JBoss AOP, and JBoss Rules. Developed POC for 3D map rendering application with OpenGL and OpenMAP which utilized 200+ Gigabytes of GIS data in various formats including DTED, CADRG, CID, GeoTIFF. Co-designed & implemented business logic & validation rules using Fair Isaac Blaze Advisor before converting to JBoss Rules after licensing issues. Both were integrated with the application code non-intrusively via JBoss Aspect Oriented Programming. 	Round Rock, TX
	8/97-12/00 (4 year gap is college) Motorola <i>C++ Programmer</i> <ul style="list-style-type: none"> Started working at the age of 15. Took on major role in the development of a virtual reality training application with Direct3D for use in Motorola factories. 	Schaumburg, IL
Research	Summer 2007 Independent Research	Austin, TX

	<p><i>Independent Research: Polyphonic Transcription VST Plugin</i></p> <ul style="list-style-type: none"> Developed Virtual Studio Technology Plugin implementation of the polyphonic music transcription algorithm described below. Optimized algorithms for production use. Used C++. (Code available on request of potential employer)
	<p>Summer 2005 University of Texas Austin, TX</p> <p><i>Polyphonic Transcription: Parallel Implementation</i></p> <ul style="list-style-type: none"> Developed a parallel processing implementation of polyphonic music transcription algorithm(described in next section). Tested on supercomputers with thousands of processors. Wrote a paper describing results and lessons learned.
	<p>Spring 2005 University of Texas Austin, TX</p> <p><i>CS379H Honors Thesis: Polyphonic Transcription</i></p> <ul style="list-style-type: none"> Continued previous research by implementing polyphonic music transcription using Bayesian statistical modeling (Switching Kalman Filter Model). Developed effective application under Matlab environment; included mono/polyphonic transcription as well as instrument-specific EM parameter learning algorithm. Performed research independently, which was later evaluated by Professor Novak as well as former Chairmen of Astronomy, Bill Jefferys. Received an A for the course.
	<p>Spring 2004 University of Texas Austin, TX</p> <p><i>CS370 Undergraduate Research: Monophonic music transcription</i></p> <ul style="list-style-type: none"> Developed software which detected the pitch of real-time audio input and converted it to MIDI messages. Earned an A for independent research supervised by Prof. Gordon Novak. Implemented using DFT based fundamental frequency detection; as well as an original note onset/offset detection algorithm.
Security Clearance	DoD SECRET security clearance.
Technical Skills	<p>Languages: Java/JEE, Python, C, C++, HTML, CSS, Javascript, PL/SQL, MATLAB</p> <p>Mobile: Android</p> <p>Java/J2EE 5: Web Services (JAX-WS, SOAP, JAX-RPC, JAXB, UDDI), JAXR, JPA, JMX, JMS, BPEL, Ant, Maven, Subversion, CVS, junit, JSF, Spring, Quartz, Eclipse/SWT, JNI, Protobuf, ZeroMQ</p> <p>Apache: Tomcat, HTTPD, Wicket, ActiveMQ, ServiceMix, jUDDI, Scout, ODE, CXF, Axis, Axis2, Log4j, Commons (Logging, BeanUtils, Collections, Lang), Struts</p> <p>Web 2.0: Dojo, jQuery, GWT</p> <p>JBoss: Drools, jBPM, Hibernate, Microcontainer, ESB, Clustered Application Server</p> <p>Databases: Oracle 9i/10g, Postgres, MySQL, DB2</p> <p>Statistics: Bayesian Models, Switching Kalman Filter, Viterbi path estimation, Markov Model, stereo vision</p>