# **James Schram**

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# **Summary:**

Highly skilled and experienced Senior Lead Software Engineer with a long history of successful projects spanning multiple operating systems, programming languages and corporate working environments.

#### Skills:

- Android, iOS, Mac OS, Windows Mobile, Win32
- Android Studio, Eclipse, NetBeans, XCode, Visual Studio, .NET, Cygwin, CodeWarrior, ARM ADS, MPW
- Agile, Jira, Notion, Asana, Confluence, Kibana, Sentry, Fabric, Crashlytics, Localytics, Flurry, AdMob, Triton, HelpShift
- Git, SourceTree, SubVersion, SmartSVN, TortoiseSVN, AccuRev, Perforce, CVS, and SourceSafe Source Code Control Systems
- Java, Kotlin, JNI, SQL, C, Objective-C, C#, C++, Assembler, Ant, Maven, Bash, CMD, Python, Object Pascal
- JavaScript, ActionScript, PHP, HTML, CSS, XML, XSD, DOM, XPath, SOAP, JSON, SQL, AIDL, HTTP, HTTPS
- · Object Oriented Design and Programming Techniques, Custom Applications and Communications Frameworks
- Written and Verbal Interpersonal Skills and Public Speaking, Problem Resolution Techniques

# **Employment:**

**Philo – Research & Development** Senior Android Software Engineer 2019 to 2020

Responsibilities included ongoing development of the Philo app for Android, new app features and functionality, issue tracking and resolution, architecture and code reviews, working with the Product Management and Design teams to understand requirements, and quickly deliver robust engineering solutions.

*The E.W. Scripps Company – Research & Development* Senior Lead Android Software Engineer 2016 to 2019

Stitcher was acquired by The E.W. Scripps Company in June 2016.

Responsibilities included leading the ongoing maintenance and development of the Stitcher podcast app for Android, ongoing maintenance and development of its numerous automotive integrations, design and construction of new app features and functionality, project coordination, issue tracking and resolution, software architecture and code reviews, advising product management teams, and mentoring other developers.

**Deezer – Research & Development** Senior Software Engineer 2014 to 2016

Stitcher was acquired by Deezer in October 2014.

Responsibilities included continued development of the Stitcher app, Android lead for podcast integration into the Deezer app, development of the Chromecast implementation in the Deezer app, ongoing development of existing integrations in both apps, design and construction of new app features, project coordination, issue tracking and resolution, architecture and code reviews, and mentoring other developers.

Stitcher Inc. – Automotive Partner Integration Senior Software Engineer 2013 to 2014

Responsibilities included all automotive and home entertainment system integration engineering for the Android and iOS versions of Stitcher and its Internet Service clients, creation of API documentation and sample code, ongoing development of existing integrations, design and construction of new integrations, project coordination, issue tracking and resolution, architecture and code reviews, and mentoring other developers.

Ongoing partnerships include BMW, Ford, GM, Jaguar, Land Rover, Nissan, Mazda, Porsche, Subaru, Toyota, Volvo, Aether, Airbiquity, AT&T, Bosch, Clarion, Delphi, JCI, LG, OpenCar, Parrot, Panasonic, Pioneer, Samsung and others.

### Good Technology - Lead Automation Developer

Senior Software Engineer 2012 to 2013

Responsibilities included working with the Product Management teams to understand, clarify and shape requirements, designing and implementing mobile applications and test automation frameworks, and mentoring other developers. Led the Java restructuring effort of an existing composite-architecture automated test framework, for use by in-house Quality Assurance teams in validating their Android OS product Good For Enterprise, a secure mobile email and collaboration suite.

SanDisk Corp. - Research & Development Senior Staff Software Engineer 2007 to 2011

Responsibilities included product design, development, engineering and support of desktop applications and mobile device components utilizing SanDisk's Trusted Flash technology, creation of developer documentation, sample code, framework training, and project coordination with Mobile Network Operators and Media Content Providers.

Applications, Framework Components and SDKs were developed for the Android, Windows Mobile and Nokia Symbian mobile operating systems, as well as the Macintosh and Windows desktop operating systems, using Java, JNI, C, C++, C#, HTML, CSS, XML, XSD, SQL, JavaScript, ActionScript, Adobe Flash, Adobe Flex Builder, Visual Studio, .NET, ASP.NET, HTTP and HTTPS, NetBeans, Eclipse, Cygwin, Ant, Bash and CMD scripting.

## Major Projects:

- Lead technical engineer responsible for porting SanDisk's proprietary FAT32 file system and microSD card drivers to a multi-client Android Service for use by Mobile Network Operators' custom applications. This self-documenting JavaDocannotated Android SDK was created using Eclipse, Ant, Cygwin, Bash and CMD shells, Java, the JNI and C. Robust, high-performance developer APIs for the microSD file system and card were exposed at both the Java and C-native levels. In addition to the AIDL Binder Interfaces, the Android Service also included a multi-threaded micro Web Server to deliver secured content to requesting applications via HTTP. AccuRev and Git were used for source code control. Due to the testing complexity of this product, a custom XML-driven Quality Assurance Test Framework and corresponding suite of tests were developed in parallel to validate every exposed API, thus achieving 100% reliability certification and best possible performance.
- Prior to the popularity of Internet-connected televisions and networked components, I was the lead engineer on the Fanfare/TakeTV project, a small portable flash thumb drive containing a built-in DivX video player. This portable Win32 application hosted a dynamic Adobe Flash Web Site UI for browsing and downloading movies and other media content from a centralized server to the USB device via HTTPS. After downloading, the user could then unplug the device from the computer and into a docking station connected to a large-screen television, for more leisurely viewing using the device's included remote control. Visual Studio, C#, C and the .NET framework, HTML, CSS, DOM, XPath, XML, XLST, XSD, SOAP, JSON, ActionScript and JavaScript were employed in this project. Subversion was used for source code control.

Developed several Nokia Symbian and Windows Mobile applications for demonstrating content discovery, download, synchronization and device configuration functionality for Business Development with Mobile Network Operators interested in bundling a customized SanDisk microSD card as an end-customer service option. Applications were built using the Nokia SDK, Eclipse, the Windows Mobile SDK, C#, C++ and C, Visual Studio and the .NET mobile framework, and ASP.NET for Win32 Server-side functionality. Various XML/XLST schemas were developed to describe copyrighted media content and data-driven functional-use restrictions. Subversion and AccuRev were used for source code control.

U3 LLC (M-Systems Ltd. + SanDisk Inc.) Senior Software Engineer - Platform Support & Engineering 2006 to 2007

Responsibilities included U3 product platform support and engineering for U3 Platform Licensees and Developers, supporting applications and processes, bug/issue tracking and resolution, creation of platform documentation, sample code and knowledge base articles. Author of U3Action© for U3® smart devices, a portable process management shim utility written entirely in C for Win32 hosts. SanDisk purchased M-Systems in 2007, thus dissolving U3 LLC while promoting me to Senior Staff Software Engineer at SanDisk's Corporate Headquarters in Milpitas.

### USRobotics / 3Com / Palm / PalmSource Inc.

Senior Software Engineer - Product Engineering 1997 to 2003

Responsibilities included product development support and engineering for Palm Platform Licensees and Silicon Partners, supporting applications and processes, issue tracking and resolution, product design, architecture and code reviews, creation of licensing-related documentation, sample code, enhancements and bug fixes in the Palm OS. Ongoing product development with announced and unannounced licensees, sustaining engineering and source code control of both 68k and ARM core platforms, projects included engineering and support for all Palm OS based devices from Palm, Sony, Handspring, IBM, Qualcomm/Kyocera, Samsung, Motorola, Symbol, Fossil, Tapwave, TRG/Handera, Garmin, GSL, Hunetec, PiTech, Legend, Acer and AlphaSmart. CodeWarrior, MPW, C, C++ and Assembly were employed for all projects. Perforce was used for source code control.

#### Apple Computer Inc. - Newton Division

Senior Software Engineer - Communications Engineering

Redesigned and re-engineered the Newton Internet Enabler (NIE) Link Controller, now a collection of cooperative finite state machines which provide multiple TCP/IP connections via direct serial, modem, IrDA, LocalTalk, and Ethernet hardware using SLIP, PPP, AppleTalk, and DHCP protocols. Designed and engineered a reusable general purpose finite state machine engine for use by external developers as well as in-house applications. NIE 2.0 was delivered on time and with a higher degree of reliability than any previous release.

Senior Software Engineer - Developer Technical Support (DTS) 1994 to 1997

Responsibilities included creation of sample code, Q&A documents, articles and document review, issue tracking, e-mail and net news developer support, product design and code reviews, creation and presentation of training courses, creation and delivery of content for developer conferences and trade shows, and platform evangelism. Specialized in high and low level communications issues, the NewtonScript language, and Newton's unified object framework. I also designed and maintained the 4th Dimension/Oracle issue tracking database and client software used by the Newton DTS group.

#### Apple Computer Inc. - Information Systems & Technology Senior Software Engineer - Customer Service & Support 1989 to 1994

Lead architect and programmer for the Cafe II Customer Response project, Apple's advanced on-line customer support application serving 500+ simultaneously active users in Austin TX, Napa CA, and the Silicon Valley area. Responsibilities included the overall system architecture, database design, and custom applications frameworks. The project used Digital's ACMS transaction processing architecture to interface with their RDB database product, with Macintosh clients written in C++, Object Pascal, and 4th Dimension. The high quality, reliability, and flexibility of this software allowed it to remain in production three years beyond its projected life cycle.

## Hewlett Packard Corp. - Information Systems & Services

Software Engineer - Materials Management & Inventory Control Systems 1989

Duties included software maintenance and development for the production management modules of their materials management software (MMS). MMS used a network model database and was written in a programming language unique to the HP3000 architecture, similar to COBOL with C extensions.

#### American Health & Safety Inc. - Computer Operations Applications Programmer 1985 to 1989

Duties included installation, setup, and management of three computer networks; Macintosh, Burroughs B-96, and IBM AS-400. Administered conversion from Burroughs to IBM system. Trained users and maintained daily computer operations for the business. Designed and built custom databases and applications on Macintosh and Burroughs systems for computer aided catalog development, graphics design, sales, sales management, purchasing, inventory, and finance.

# **Education:**

University of Wisconsin, Madison Bachelor of Science in Computer Science, May 1989 Dual specialization in Operating Systems and Databases - 3.6/4.0 GPA Piano Performance & Composition, Art & Music Minor

# **Patents:**

U.S. #8886760: System and Method of Predictive Data Acquisition

## **Interests:**

SmartHome Technology; Biomimetics; Piano Performance & Composition; Graphic Design; Art; Electronics; Bodybuilding; Health & Fitness Mentor; Caregiver

# **Associations**:

Corbett Homeowners Association; Corona Heights Neighborhood Association