

Resume

Stephen J. Schmitt
150 Chestnut Ridge
Traverse City, MI 49686
571-241-6022 (Mobile)

Sschmitt47@gmail.com

Linked in: <http://www.linkedin.com/in/steveschmitt>

PROFESSIONAL SUMMARY

I am a successful software architect with more than 20 years of product design and development experience. My management background includes oversight of several development groups, overseas teams, and individual engineers, all resulting in many great commercial products.

Key successes and competencies:

- Created multiple successful, commercial products still in use after more than 2 decades.
- Competent programmer in many languages including Dart, Python, Java and C++.
- Extensive expertise with full text search technologies.
- Varied experience set including documentation systems, VOIP, Android and iOS Mobile applications, web-based applications, AWS, and SQL technologies.
- Computer Science teacher.
- Team leader, project manager, team player, and strong individual contributor.

CURRENT WORK EXPERIENCE

2022-present: Lead Flutter developer for Aspect Oriented Programming project designed to track application events and analytics data, Metova, Inc. contract (remote), Lead Flutter engineer.

2020-2022: Design, implement, and manage development team to create new social media Flutter application and supporting cloud base backend (MongoDB, AWS services, OneSignal push notifications, Sentry, etc.). Bluecheckmark, LLC.

2007 – 2020: Staff Architect and Project Manager, Gabriel, Inc., Honolulu, HI

2006-2020: Contributor and manager for VOIP systems and applications development. In addition, on team that developed fall detection/visual recognition systems for institutions and in-home care. Vixtel USA, Honolulu, HI

Accomplishments

1. Created and built initial VOIP communication/collaboration prototype using Skype and GoogleTalk and built custom VOIP stack using PJSIP for desktop phones.
2. Created materials, demos, and business strategy for 1st and 2nd round financing.
3. Delivered 1st VOIP product according to specification within aggressive schedule parameters.
4. Defined and implemented next generation office desk media phone based on Android framework. All were delivered on time and on budget.
 - Built commercial Glass Desktop Android phone.
 - Managed development of Telefield (RCA) and TEC Solutions versions
 - Managed/designed Gabriel Health Communication platform for elderly applications

5. Implemented QT and Android mobile systems on custom desktop hardware design.
6. Designed and developed cloud telephony applications using Android SDK.
7. Developed several key mobile applications including Salesforce call integration, Outlook and Google contacts synchronizer, Contacts manager, Update system, Call logging, and provisioning tools.
8. Project Manager for Splora, a full featured office VOIP mobile application including VPBX currently deployed by major customer in Indonesia.
9. Software architect for VOIP communication and human telemetry monitoring in geriatric and other institutional scenarios. Worked with team on AI modules for fall detection and facial recognition.

Duties

Research AI and machine learning software for patient monitoring and facial recognition.
 Define and implement VOIP based collaborative software.
 Design and implement automatic update/configuration of deployed software over the Internet.
 Build multi-platform mobile applications.
 Implement SOAP interface for the payment system.
 Help define and build various web pages and online DB interface.
 Develop and implement test harness for hardware.
 Research embedded platforms for second generation products.
 Work with product marketing on customer analysis, use cases, and GUI design scenarios.
 Engage in software development using Java in Eclipse and C++ for Android SDK and QT environments using Linux/VMware cross platform development systems.
 Manage a ten person team for development of Android VOIP application using Android Studio.

1996 – 2006: Senior Architect, Doclinx, Inc., Chantilly, VA

- Design, implement, and support field specific, full text search API and server deployed for Boeing 787 documentation platform. (still in use in 2021).
 - Design parallel build system using AWS that could build the 400+ document set in approximately one hour.
 - Build server (airline customer) and standalone (aircraft service bay) versions.
 - Continuous product enhancement and support for over eleven years.
- Manage major company projects and hire personnel.
- Design embedded VOIP phones and related technologies.
- Design and develop new embedded telephone product using Qtopia.
- Design and implement XML-centric PDF and Windows document translation technology.
- Research and implement “fuzzy” spelling and word match algorithms.
- Research systems for multilingual search methodologies.
- Architect XML compliant Java-based text search and retrieval technology.
- Define client-server API for search technology (Java and C++ versions).
- Research C++ platform parallel algorithms for large, terabyte full-text indexing projects.
- Create and develop new Web applications and e-commerce business software using Java technology including AJAX, Struts, and Swing.
- Research text-mining technologies such as relevancy, clustering, categorization, and AI techniques for query processing for project with Raytheon..
- Help develop media mining search and retrieval software in C++.
- Set up and manage document scanning and translation production for Hitachi manuals.
- Design and build several information search and E-commerce electronic delivery systems.

PREVIOUS POSITIONS

Visiting Instructor at Westshore College, Ludington, MI

- Develop and conduct web page design classes using IIS, FrontPage, CSS, and HTML.

Member of Technical Staff, Silicon Graphics, Inc., Mountain View, CA

- Architect SGI on line document distribution system.
- Technical lead for cross-company steering group for documentation standards and production.
- Development new information retrieval software system in C++.
- Work on first SGI web applications and editing software.
- Design and develop Frame to SGML translation software.

Independent Consultant and Partner in Optical Software Tools

- Consult with companies on large text search projects.
- Design and develop new information retrieval system for Sony.

Engineering Manager, KnowledgeSet Corp., 888 Villa St., Mountain View, CA

- Set up and manage Mountain View, CA development office.
- Implement full text indexing and text retrieval software: KRS(Knowledge Retrieval System)
- Develop 1st commercial large-scale data access CD-ROM applications.
- Port software to other platform for OEMs.

Project Manager, Digital Research Inc., Monterey, CA

- Manage Logo language development team for Sony and other CPM-based computer systems.
- Member of GEM graphics OS development team.
- Key member of group that developed Atari GUI software platform.

Visiting Instructor of Computer Science, Michigan Technological Univ., Houghton, MI.

- Manage Computer Science Lab
- Proposal writing and acquisition of funding for lab.
- Teach freshman and sophomore level classes.

Software Engineer, Hewlett Packard, Loveland Instrument Division, Loveland, CO

- Define and develop board test language software.
- University recruiting.

EDUCATION

Graduate study at Michigan Technological University, Houghton, MI

MSCS Colorado State University, Fort Collins, CO.

BSCS Michigan Technological University (minor in EE), Houghton, MI.

PUBLICATIONS AND PROFESSIONAL WORK

- "WebFORCE by Silicon Graphics -- WWW Authoring", Poster presentation at WWW '95 Conference in Darmstadt, Germany.
- "Multimedia Authoring and Viewing Tools", ACM Hypertext '93 Proceedings.
- "MP/M II: A Microcomputer Operating System for the 80's?", March 1983, BYTE Magazine.
- Editor: "Boards and Buses" column, Softalk for the IBM Personal Computer, 03/1983 – 08/1983
- "Virtual Memory for Microcomputers: Memory Management IC's Pave the Way", 04/1983, BYTE Magazine.

PATENTS: "METHOD AND APPARATUS FOR MAINTAINING CONNECTIONS FOR INSTANT COMMUNICATIONS", 2007, CO-INVENTOR

EXPERIENCE SUMMARY

Architect and Developer of Enterprise Software Systems:

Information Handling Services (**IHS**): Standards Search and E-commerce Sales. Worked directly with IHS to support customer base and contract delivery.

Hitachi: Document scanning, XML conversion, and Java-based Electronic Delivery

McGraw-Hill: Dodge Plans and Specs E-commerce System for Building Plans & Drawings in US.

Verizon/MCI: Marco Polo TM Education Material Search System

Citrix: Port of Web Portal development system to J2EE platform.

Boeing: XML Full Text Information Retrieval System for maintenance documentation.

Raytheon: Information Text Mining System for city of Houston.

Texas Instruments: Digital Logic Documentation CD Electronic Delivery System.

Xilinx: Java Applet system for Search and Viewing of Data Product Manuals.

Expert in Text Information Retrieval:

Indexing of very large text bases including employment of parallel algorithms.

Relevancy techniques, entity extraction and multilingual searching methods.

Extensive practical experience with Dart, Java, Kotlin, Swift, C++, C, and C# languages.

Advanced knowledge of XML and SGML markup and data transfer technologies.

Experience with VOIP technology including SIP, GlobalIP, and Skype.

Familiar with J2EE and Java-related technologies.

Experience with RDBMS including management, SQL variants, stored procedures, and triggers.

Specific skills in performance analysis and optimization techniques for large data sets.

Experience with cross platform development using Flutter, VMware, C++, iOS, Android, and Qtopia platform.

Strong emphasis on design for testability and maintenance.

Significant experience working with customers in all phases of project management.

Familiar with all aspects of Software Development Life Cycle from objectives, requirements, design, implementation, and testing to maintenance, support and quality improvement.

Experience with Agile programming concepts.

Expertise in algorithm design and complex software research.

Excellent technical communication skills.

Significant experience with customer management, customer requirements, and contract fulfillment.

Proficient leadership and management skills for small software development teams.

Experience with education and computer science instruction.

TECHNICAL SKILLS

- **Programming Languages:** Dart, Java, Python, PHP, JavaScript, C++, C#, Objective C, VBASIC
- **Relational/Object DBs:** Oracle, SQL Server, MySQL, SQLite, Solid, Firebase, MongoDB
- **Object Design and Modeling:** UML, Use Cases
- **Data Access/Exchange/Presentation Languages:** HTML5, XML, JSON, SQL, CSS
- **GUI:** Awt, MFC, JFC/Swing, Android, QT Embedded, Apple UI, iOS,
- **IDE:** Eclipse, Visual Studio, IntelliJ, Android Studio, Xcode
- **XML Technologies:** XSLT, XSL, DTDs, XSD, DOM, XPath
- **Java Technologies:** J2SE, J2EE, EJB, SOAP, JSP, Servlets, JNI, JDBC, JUnit
- **Distributed Computing:** J2EE/EJB, RMI/JMS, DCOM
- **Web Applications and Web Pages:** JSP, Struts, AJAX, ASP.NET, HTML 5
- **Web Application Servers:** Tomcat, NGINX, IIS.
- **Cloud Services:** AWS
- **Repositories/Configuration (CI/CD)/Build Tools:** GitHub, Bitbucket, Atlassian (Jira, Confluence), CVS, SVN, ANT, Gradle, Make, Git and, Jenkins, AWS devops, CloudBees
- **Operating Systems:** Unix (SGI IRIS, Linux), Windows (Vista, XP, NT, 7, 10), macOS, and AS400
- **Mobile Platforms:** Android, iOS, Flutter
- **VOIP:** PJSIP, Googletalk, Skype, SIP, SIPJS