Adam Cheyer

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Summary of Qualifications

Founder: *Viv Labs* (an intelligent interface to everything); *Siri, Inc.* (virtual personal assistant, acquired by Apple); *Sentient.ai* (massively-distributed machine learning); Founding Member: *Change.org* (150M people taking action). **VP Engineering**: *Verticalnet* (NASDAQ:VERT), *Dejima Inc.*, *Siri Inc.*, *Viv Labs*. Engineering Director, *Apple*. **Researcher/Inventor**: *60+ peer-reviewed publications and 26 issued patents* in fields of Intelligent Agents, User Interfaces, Distributed Computing. At SRI, Chief Architect for CALO, DARPA's $200M machine learning project.

Experience

Co-Founder & VP Engineering, Viv Labs **September 2012 - present**

Viv Labs radically simplifies the world by providing an intelligent interface to everything.

- Built first prototype of end-user application, platform, and dev tools to explore and communicate the vision.
- Engineering management: hiring, setting product roadmap and milestones, leading engineering meetings.
- Domain modeling and data/service integration for numerous domains including food, wine, local search, games, chat, stocks, and date/time understanding (JavaScript, Java, SixTree).

Director of Engineering, Apple **April 2010 - June 2012**

Apple's Siri revolutionized the voice interface experience on hundreds of millions of devices.

- Overall responsibility for server-side engineering for Siri: AI algorithms, scalable platform, application domains, data & tools, deployments and ops.

Co-Founder & VP Engineering, Siri **March 2008 - April 2010**

Siri was the first commercially available broad-domain spoken conversational system.

- Key contributor to original algorithms and technical approach. Hired team, managed product features and engineering release schedule, ensured timely delivery of a quality product. Developed in Java for platform features (language understanding pipeline) and for domain integration (e.g. knowledge & chat domains). Sold Siri to Apple in April 2010.

Co-Founder & Advisor, Sentient.ai (originally called Genetic Finance) **July 2007 - present**

Sentient manages one of the largest compute infrastructures in the world, employing machine-learning techniques to solve complex problems in fields such as Finance, Health, Genomics, Agriculture, and Retail E-commerce.

- Co-Founder and Director (Board). Contributed to the technology, IP, product and business model. Helped raise a significant B round of funding. Continuing in role as Advisor.

Founding Member & Advisor, Change.org **January 2006 - present**

Change.org is the world's largest petition platform, empowering people everywhere to create the change they want to see.

- Wrote first version of website in Ruby on Rails. Engineering management. Continuing in role as Advisor.

Program Director, AI Center, SRI International **April 2003 - March 2008**

- Chief Architect of the CALO/PAL project, an ambitious effort to create a next-generation personal cognitive assistant. Responsible for delivering a functioning system that can provide user value and show improvement on a set of yearly SAT-like tests through "learning in the wild." Managed integration of state-of-the-art AI technologies from 25 research institutions, universities, and commercial companies.

VP Engineering, Dejima **January 2002 - April 2003**

- Responsible for all aspects of development for Dejima's product line, including product management, engineering, and engineering services (QA, Training, Support, Technical Publications, IT). Dejima's products include a suite of integrated development tools supporting a patented approach to software engineering; a carrier-grade application server for deploying highly scalable and available Dejima applications; and a number of applications providing "Direct Access" to consumer and enterprise content and services.

VP Engineering, Enterprise Products, Verticalnet **November 1999 - January 2002**

Verticalnet was one of the top 5 IPOs of 1999, offering a suite of applications for business-to-business e-commerce.

- Responsible for the development of all enterprise products sold by Verticalnet. These included a set of integrated trading applications (auction, reverse auction, RFQ, structured negotiation); C2 Suite (an ontology-driven distributed data visibility and comprehension framework); OSM, a platform for managing intelligent integration throughout the extended enterprise; and applications leveraging these, including strategic sourcing, spend analysis, and demand visibility.

Co-Director, Computer Human Interaction Center, SRI International **February 1999 - November 1999**

- Responsible for providing research direction for SRI's advanced user interface group, comprised of eleven research staff and eight international visitors. Our initial research focus was on mediated spaces, and we constructed six integrated applications: two for the home, two for the car, and two for the office.

Sr. Computer Scientist, Artificial Intelligence, SRI International **February 1999 - November 1999**

- Primary inventor of "Delegated Computing", a new approach to building complex, dynamic systems. Led research group focusing on distributed agent architectures and advanced user interfaces for web services. Managed successful projects for government and commercial clients totaling several million dollars in research and development. Principal designer and developer of the Open Agent Architecture (OAA), a framework for constructing distributed applications using a dynamic community of software agents.

Sr. Software Engineer, Bull S.A. **September 1987 - August 1992**

- Responsible for the implementation of the core inference engine of NOEMIE, an expert tool that automates the configuration of all hardware and software orders from a product line of more than thirty thousand parts.

Publications and Patents

Selected from more than 60 publications and 26 issued patents (others still pending).

- Method and Apparatus for Building an Intelligent Automated Assistant. US Patent #8,677,377, March 2014.
- Software-based Architecture for Communication and Cooperation among Distributed Electronic Agents. US Patent #6,851,115, February 1, 2005.
- Mobile navigation of network-based electronic information using spoken input. US Patent #6,757,718. 2004.
- Distributed evolutionary algorithm for asset management and trading. US Patent # 8,825,560, Sept. 2014.
- The Open Agent Architecture: A framework for building distributed software systems. Applied Artificial Intelligence: An International Journal. Volume 13, Number 1-2.
- Multimodal Maps: An Agent-based Approach. In book "Multimodal Human-Computer Communication", Lecture Notes in Artificial Intelligence #1374, Bunt/Beun/Borghuis (Eds.), Springer, pp. 111-121.
- IRIS: Integrate. Relate. Infer. Share. 1st Workshop on The Semantic Desktop at the International Semantic Web Conference, November 2005, Galway, Ireland.
- A Collaborative Programming Environment for Web Interoperability. 1st Workshop on Semantic Wikis (SemWiki '06), June 2006, Budva, Montenegro.
- Evolution of the Laws that Deal with the Utilization of Information Networks. 2003 BISC FLINT-CIBI International Joint Workshop on Soft Computing for Internet and Bioinformatics, 15-19 December 2003, University of California Berkeley.

Awards

- Selected to Upstart 100 (disruptive and game-changing technology) for Viv (2016).
- Crunchies Award: Best Technical Achievement for Siri (2011).
- SXSW Innovative Web Application (2010).
- MIT Technology Review's Top Ten Technologies to Change Your Life (TR-10 2009).
- SRI Alumni Hall Of Fame (2013).
- "Golden Nugget" Inventor Award, SRI International (3 times: 2003, 2004, 2005).
- Brandeis University Computer Science Entrepreneur of the Year (2012).
- UCLA Outstanding Master's Student Award, School of Engineering and Applied Sciences (1993).

Education

M.S. Computer Science in Artificial Intelligence, UCLA **September 1992 - June 1993**

Winner of "Outstanding Masters Student" award for the School of Engineering and Applied Sciences (SEAS).
Thesis: Implemented the first screen-reader for visually impaired users on Microsoft Windows.

B.A. Computer Science, Brandeis University **September 1984 - June 1988**

Graduated with Highest Honors.