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WORK EXPERIENCE

DISAGGREGATE • 2002 - Present

Mission: Speech Technology Consulting.

Independent consulting for speech technologies. Help people understand speech technologies; provide architecture and design to incorporate speech technology into products and services; assist in managing projects that use speech technology.

DIALOGIC CORPORATION • 1996 - Present

1996 - Present: Speech Technology

Mission: Architect and Advocate for Speech Technologies.

- Guide technical development of next generation speech technology hardware and software. Discover projects and new technologies; mobilize resources; inform, educate, and advise top management; craft agreements with other departments; consult. Determine requirements; analyze and/or create system, architecture and design; survey industry technology; align technology and market; advise on corporate direction for new technologies.
- Track and evaluate speech technologies. Liaise with external speech technology developers. Mediate between them and internal architects/developers.
- Design and oversee/develop software framework to permit rapid migration of Automatic Speech Recognition ASR to next generation platforms.
- Advocacy: Lecture at industry forums. Publish white papers. Coordinate Enterprise Computer Telephony Forum's ECTF *ASR Task Group*. Monitor/attend other standards groups.

AT&T BELL LABORATORIES • 1987 - 1996

1991 - 1996: Speech Technology

Mission: develop and deploy speech recognition systems throughout the world.

- Team leader, AT&T Robotic Operator: Proved concept of robotic operator. Worked closely with marketing to refine application; chose, developed and deployed verifiable artificial intelligence AI to mimic operator actions. Generated metrics.
- Automatic Speech Recognition ASR for SPRINT: Refined, extended, deployed, and supported Digital Signal Processor DSP and UNIX software. Trained customer testers. Visited deployment sites to educate support personnel and resolve complaints.
- Telecommunications Device for the Deaf TDD : developed network grade, DSP based recognition system. Patented technology may be used in tandem with spoken requests.
- Moderator, industry standards: developed ASR application programming interface API under the auspices of the Signal Computing System Architecture SCSA and the ECTF.

1987 - 1991: Special Services

Mission: Telephony services for national security.

- Nationwide Emergency Telecommunications Service: an author of response to U.S. government RFP. Initiated, designed and developed database to track dozens of authors and relate responses to RFP requirements, and tools to automatically extract RFP requirements.
- Defense Switched Network, Regression Test Team Leader: Determined testing goals; developed theory of testing; improved test procedures to measurably increase error detection and minimize expenditure. Measured and tracked both errors and test processes.

NORTHWESTERN UNIVERSITY • 1979 - 1987

Department of Physics

Mission: Experimental Condensed Matter Physics.

- Post Doctoral Fellow. Built high frequency, high voltage, computer controlled precision RF equipment for Nuclear Magnetic Resonance apparatus. Analyzed experimental results. Assistant Director of NMR laboratory.

SPECIAL EXPERIENCE

ENTERPRISE COMPUTER TELEPHONY FORUM • 1993 - 2001

Mission: Industry Standards for Computer Telephony.

- **Technical Chair**: Technical Chair of the Enterprise Computer Telephony Forum. Manage the technical program and technical managers of the ECTF.
- **Lead team of industry experts** *ASR Task Group* to create standard application programming interfaces APIs for ASR. Maintain overall view of ECTF architecture and liaison with fellow coordinators. Negotiate with other standards groups SAPI, JSAPI, VoiceXML, etc. .

SKILLS

Speech Technologies

- Cross industry knowledge of speech technology techniques: speech recognition, text to speech, voice biometrics
- Implement algorithms on Digital Signal Processors DSP
- Creative applications with existing technology
- Testing of ASR and ASR applications

Communication

- Public Speaking: Relaxed, informative, and entertaining
- Presentations: for customers, executives, and students
- Writing: effective and concise
- Graphics: clear and engaging

Software and Hardware

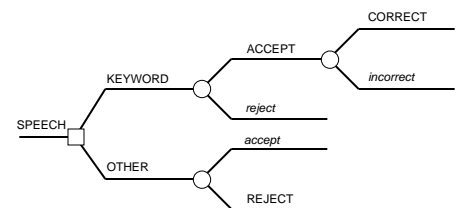
- Specialized speech technology programming constructs:VoiceXML, CCXML, S. . . , etc.
- UNIX, Linux, bash, ksh, shell, Python, Perl, XML, C, FORTH, FORTRAN, HTML & etc.; Databases SQL ; other lan guages on request.
- High performance software for critical real time systems.
- Logic, RF hardware
- Open source projects: Voice to Instant Messaging, Voice Biometrics for Application Security

PATENTS, PUBLICATIONS, TALKS

- Patents: No. . . . , “Automatic processing of calls with different communication modes TDD in a telecommunications system”; Patent No. . . . : “Method for automatic speech recognition of arbitrary spoken words”; Patent No. . . . : “Method for automatic speech recognition in telephony”
- Numerous Papers and Presentations at industry forums: American Voice Input/Output Society AVIOS , ASAT, SpeechTek, Computer Telephony Expo, ECTF/SCSA Developer Conferences, VoiceEurope, Dr. Dobb’s Journal, TVUI
- Physics: Nuclear Magnetic Resonance of metals and high temperature superconductors

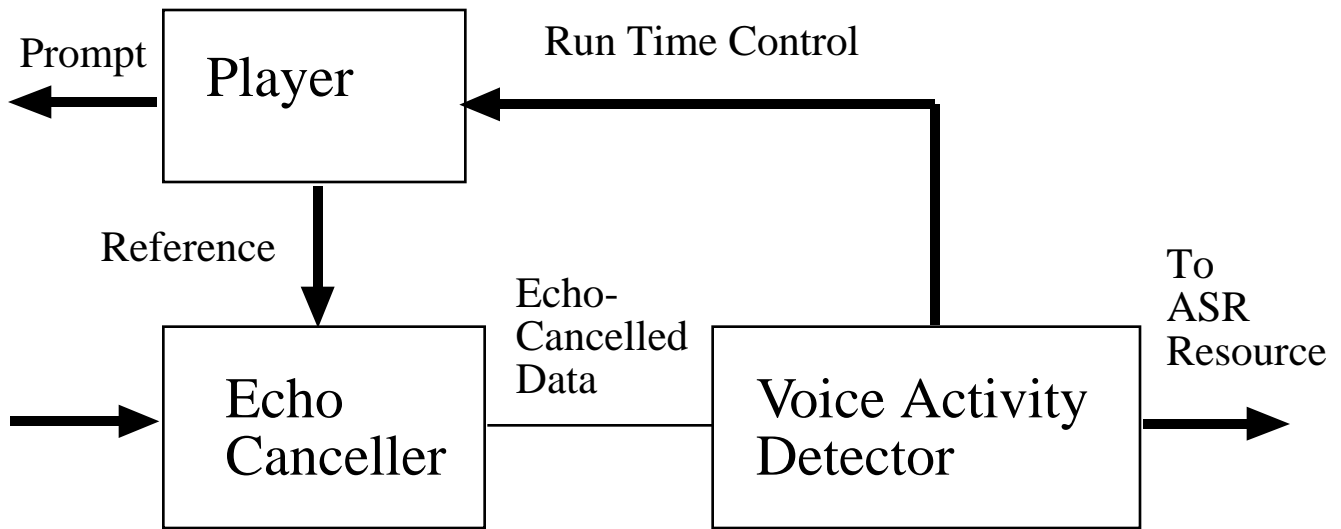
EDUCATION

- Ph.D., Physics, Northwestern University,
- M. Sc., Physics, Northwestern University,
- B. Sc., Mathematics and Physics, Hebrew University of Jerusalem, Israel,



*Errors in Speech Recognition:
[false] reject, incorrect, [false] accept*

continued



Role of Voice Activity Detector in Automatic Speech Recognition Resource Front End

continued

OF INTEREST

- Languages: English, Hebrew, retrievable French
- Security clearances: on request

OTHER ITEMS OF INTEREST

- Past President, Congregation Anshe Motele
- House Manager, Hugo Award Ceremonies, and
- Panelist, World Science Fiction Convention