PHILIP HURZELER, Ph.D.

252 High Street, Newburyport MA 01950-3827 978.465.0697 ph@computer.org

Positions Held

Computer database consultant. Technologies include PostgreSQL, MS SQL, MySQL, Perl, PHP, VB, ASP, Access, C 2005-present

Senior Database Developer, Titan Corp, Billerica MA 1996-2005

Technical Director, Cardiac Datacorp, Inc., Bloomfield CT
(concurrently): VP Engineering, Data Medical Inc., Wynnewood PA

Biomedical Engineer, Cardiac Catheterization Unit
Montefiore Hospital, NY NY

Research Bioengineer, Montefiore Hospital, NY NY

Certifications

Clinical Engineer "Testamur"- International Certification Commission for Clinical Engineering and Biomedical Technology (ICC)

NASPExAM (Special Competency in Pacemaker Technology and Electrophysiology)- North American Society for Pacing and Electrophysiology.

Professional Engineer- State of Connecticut #12362

US DoD Secret Clearance

Skills

Computer Proficiencies: MS SQL Server, MySQL, VB, ASP, HTML, Rational Suite, UML, XML, Visio, MS Access, PHP, C.

Cardiac pacemakers and electrophysiology: Expert in pacemaker electronic and software design. Multiple publications in peer-reviewed medical journals.

Medical Instrumentation: Consulted with instrumentation manufacturers. Assembled and operated recorders during open-heart surgery.
Regulatory: Prepared FDA premarket notification and oversaw clinical trials.

Pure Research: Developed an EKG system based upon an extended mathematical heart model and conducted clinical trials.

Patent: Ride Share Contact System, No. 7,080,019

Product Development Achievements

- Modeled and implemented an online transaction processing system for statewide medical testing laboratories. Specimens are batch-tested and tracked thru multiple dynamically reconfigured test paths. Confirmatory retests are automatically triggered. Operator errors are fixed anytime, even after reporting. Links are maintained with multiple patients, doctors, addresses, and names. All is secured and audited for HIPAA and other regulatory compliance. Created Use Cases, UML Diagrams, and the database schema. Coded web pages, VB and Access front ends, and stored procedures. Paperwork and manual operations were eliminated. Clerical errors are prevented while technical errors are corrected, tracked and audited. Management reports are automated.

- Updated the database schema and web pages of Massachusetts' Criminal Justice Training online school registration system, and converted legacy office data.

- Developed the Mass. Rehabilitation Client Information System (MRCIS), an online transaction-processing Case Management application that eliminates paperwork with over 40 screens, 30 reports, and 15 form letters for line, administrative, and regulatory tasks of 110 Counselors in 27 Area Offices serving 10,000 Clients; and meets security requirements.

- Led the technical development of the New Hampshire Case Management System supporting 60 Counselors in 10 Offices, serving 40,000 Customers.

- Transtelephone Defibrillator Beepergram (TDB): Ambulatory post-crisis ECG and implanted device monitor. Design, test, manufacture, file with FDA.

- Created Database systems for: Commercial pacemaker follow-up, a hospital pacemaker clinic, a cardiac electrophysiology lab, private psychiatric practice.

- ECG online data center hardware and software: Directed systems design of a transtelephonic pacemaker monitoring center, including graphic waveform editors, a 3-tier database, and graphic patient test reporting.

- Digital ECG Ambulatory Loop Recorders: Wrote specifications, supervised design, negotiated manufacture.

- Holter ECG Scanner: Designed, assembled, and programmed a novel "page display" workstation to exploit human pattern recognition capabilities. Trained users and conducted clinical trials.

- Transtelephone Pacemaker ECG Receivers: Directed design and fabrication.

Data and Statistics:

Pacemaker Longevity: Established reporting system to derive scientific calculations of pacemaker system longevity from commercial follow-up raw data. Published the results.

Pacemaker Testing Incidents: Established a new measure of pacemaker monitoring efficacy, conducted studies, and published the findings.

Education

Ph.D. Bioengineering, Polytechnic University	1972
M.S. Electrical Engineering, Polytechnic University	1966
B.S. Electrical Engineering, Manhattan College	1962

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