

# David A. Mooney

430 Chickadee Lane • Stratford, CT 06614  
(203) 645-2900 • dmooney@dmooney.org

## Work History

- **Fujifilm Medical Systems** **Stamford, CT**  
2005 – Present  
*Lead Software Engineer, Synapse PACS Standards Group*  
Over seven years of experience developing high-performance, mission-critical, healthcare interoperability software primarily using C++. Shipped 10 significant updates to Synapse, Fujifilm's web-based Radiology PACS.
  - Owned Synapse's DICOM server and coded numerous features and improvements including a partial rewrite to replace the core DICOM library. Refactored code to reduce acquisition time of CT images from 200ms to 60ms and increase the maximum acceptable image size from ~250MB to essentially unlimited.
  - Lead developer on Synapse's cross-enterprise document sharing (XDS/XDS-I) implementation. Coded C++ libraries to build and parse all required XML/SOAP/MTOM/XOP messages and HL7 Clinical Document Architecture (CDA) documents. Implemented on-the-fly basic patient privacy consents (BPPC) enforcement and display using JavaScript, a C#/JSON RESTful web service and XSLT.
  - Developed expert-level knowledge of healthcare and general-purpose standards, especially DICOM and the array of standards used in XDS.
  - Led interoperability testing of Synapse PACS at nine IHE Connect-a-thons in North America and Europe between 2006 and 2011. With careful planning and intense debugging, passed 100% of all profiles participated in at every event.
- **LinksPoint** **Norwalk, CT**  
2001 – 2004  
*Senior Software Engineer*  
Employee number seven at LinksPoint, a startup focused on location-aware mobile apps and GPS.
  - Shipped a total of eight software products and custom solutions.
  - Designed and implemented a mobile app the NYC Health department used to modernize their paper-based water, sewage and beach inspection process using C++ and SQL Server.
  - Developer on several other enterprise mobile apps for NYC and other customers including two rush projects used in the recovery efforts following the World Trade Center attack. Responsibilities varied according to need, but at various times I designed and implemented user interfaces, wireless data synchronization, hardware integration, etc. – whatever was needed to get the job done.
  - Developed web-based back-end in PHP and desktop front-end in C++ for content download and product activation for StarCaddy, a consumer mobile app for golfers.
- **IPC Information Systems** **Fairfield, CT**  
1999 – 2001 (Internships in 1997 and 1998)  
*Software Engineer*
  - Designed, coded and shipped a highly available, multi-threaded service responsible for consuming vast quantities of telephony events via custom TCP and UDP protocols. The service created an in-memory model of everything happening on thousands of phone lines and telephones. Developed a C++ and pub/sub API upon which a variety of applications requiring call status information were created.

## Education

- **B.S.E. Computer Science and Engineering** **1994 – 1998**  
**Fundamentals of Macroeconomics** **2004 (Continuing Ed)**  
*University of Connecticut* *Storrs, CT*
- **Machine Learning, Natural Language Processing (in progress)** **2011, 2012 (Not for Credit)**  
*Coursera/Stanford University; Regression, Sentiment Analysis, Clustering, Computer Vision using Octave and Python*
- **Introduction to Artificial Intelligence, Artificial Intelligence for Robotics** **2011, 2012 (Not for Credit)**  
*Udacity/Stanford Univ. and Udacity/unaffiliated respectively; Planning, Learning, Filters, Motion, Localization, Search*

## Miscellaneous

- Built a web-based MP3 jukebox system using PHP, Apache, CDDDB data and a custom WinAmp plug-in.
- I hold both U.S. and Irish citizenship.
- I have a Confidential U.S. security clearance.