Matthew Cooper, D.Sc.

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www.cohans.net/mlc

Research Interests

- information retrieval, applied machine learning, multi-modal data mining
- probabilistic modeling & inference, machine perception, information theory

Experience

08/00 – present **FX Palo Alto Laboratory, Inc.** *Senior Research Scientist & Group Lead* Palo Alto, CA
- Research and development of content-based multimedia analysis to facilitate interactive media management and information retrieval applications.
- Substantial prototyping experience with Python/Pandas/Scikit-Learn and C/C++
- Provided applied machine learning design and development support lab-wide.
- Lead for Integrative Analytics research theme since 2012
- More than 60 professional publications, over 20 granted U.S. patents, over 20 pending patent applications. Additional details available.

01/00 – 08/00 **NetCapita, Inc.** *Consulting Software Engineer* Baltimore, MD
- Research and development of low bandwidth internet videoconferencing software.
- Technology is now under development at Animetrics, Inc., Jackson, NH.

09/98 – 01/00 **Center for Imaging Science, Johns Hopkins University**, *Research Assistant*
- Completed doctoral research on information-theoretic analysis of object recognition.

01/93 – 12/94 **Dept. of Electrical Engineering, Washington University** *Research Assistant*
01/96 – 09/98
- Developed automated object recognition algorithms using infrared radar systems including efficient representation of the radiant appearance of observed objects to achieve robustness to thermodynamic variability.

01/95 – 01/96 **Washington University Genome Sequencing Center** *Programmer & Analyst*
- Developed image processing algorithms and software for four color electrophoretic DNA sequencing. Related software helped to sequence *C. elegans* and human genomes.

Education

Washington University in St. Louis
D.Sc. Electrical Engineering, 1999	B.S. Electrical Engineering, 1993
M.S. Electrical Engineering, 1994	Minor: Computer Science
Coursera, deeplearning.ai, edX	15 certifications 2012 - present

Awards and Memberships

- ACM *Distinguished Member*: SIGMM, SIGIR
- IEEE *Senior Member*: Information Theory Society, Computer Society
- Boeing-McDonnell Foundation Fellowship
- Office of Naval Research AASERT Fellowship
- Washington University School of Engineering Dean's Honorary Scholarship
- State of Missouri Bright Flight Scholarship
- Tau Beta Pi, Engineering Honor Society