

Matthew Cooper, D.Sc.

m.cooper@computer.org
www.cohans.net/mlc

Research Interests

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

Experience

[Additional details available.](#)

- 09/18 – Present **Mozilla** *Staff software engineer, machine learning & recommendations* San Francisco, CA
- Working in data & learning team to power recommendations for [pocket](#) app (30M registered users) and the firefox [new tab](#) (200M monthly active users).
 - Developed content recommendation pipeline for [explore pages](#) with 28% CTR and 20M monthly pageviews
 - Data mining to identify prospective content for recommendations and syndication.
- 08/00 – 08/18 **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/pydata stack and C/C++
 - Provided applied machine learning design and development support lab-wide.
 - Lead for Integrative Analytics research theme since 2012
 - More than 70 professional publications, over 40 granted U.S. patents, over 20 pending patent applications.
- 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 **Dept. of Electrical Engineering, Washington University** *Research Assistant*
- 01/96 – 09/98
- Completed doctoral research on information-theoretic analysis of object recognition.
 - 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

M.S. Electrical Engineering, 1994

Coursera, [deeplearning.ai](#), edX

B.S. Electrical Engineering, 1993

Minor: Computer Science

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