

# JOSEPH MANCUSO

*detailed resume*

current location: Central New Jersey, United States  
one-page summary available at [josephmancuso.com/resumes/JM\\_Summary.pdf](http://josephmancuso.com/resumes/JM_Summary.pdf)

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## CAREER SUMMARY

- MSE in Electrical Engineering Systems with 18+ Years of Diverse Professional Experience
- Extensive Work in Research & Development (R&D) Engineering, Management, and Business Development (BD)
- Technical Skills in Systems Engineering, Signal Processing, Algorithms, Sensors, Audio, and IT Systems
- Experience in Functional Management, Project Management, Proposal Management, and Technical Leadership
- Computer Skills, incl. MATLAB, C, Perl, UNIX, MicroSoft Office, Mac OS, Multimedia, and Management Software
- Skilled Technical Writer, Presenter, Educator, and Creative Artist; U. S. Citizen with Active TS/SCI w/Poly

## EDUCATION

- MSE Electrical Engineering Systems, University of Michigan, Ann Arbor / May 1996
- BSE Electrical Engineering, University of Michigan, Ann Arbor / December 1994
- Specialized Science & Mathematics Curriculum, Stuyvesant High School, New York City / June 1991
- Continuing Study, University of Michigan School of Music, Ann Arbor / September 2001 to May 2002

## SELECTED EMPLOYMENT EXPERIENCE

### **Northrop Grumman Corporation**

Information Systems Sector / Brooklyn, NY / 2013 – Present

- Systems Engineer on new emergency communications system for New York City public safety agencies
- led equipment fit-out reviews and managed design updates to improve performance for NYPD and FDNY users
- drove system requirements to closure with Customers and Stakeholders to meet program schedule goals
- managed and built out designs for \$1M+ development IT datacenter to lower cost and risk on production system
- built direct relationships with Customers and stakeholders to cultivate mutual trust in a challenging environment
- delivered policies, interface documents, and system models to improve datacenter operations and maintainability

Electronic Systems Sector / Baltimore, MD / 2009 – 2013

- Principal Engineer and Functional Manager of 16-person team spanning many programs in Radar Systems group
- innovated key solution and modeled system performance to meet critical Customer needs on classified program
- created analysis and parallelization tools to substantially lower risk and reduce cost of radar modeling programs
- grew business as winning Proposal Manager for ~\$2B IDIQ contract, and as consultant on \$100M+ captures
- designed and built modular tools in MATLAB and UNIX to increase re-usability and lower costs on R&D programs
- piloted process enhancements in team performance assessments to increase employee engagement

### **ElectroDynamic Applications (EDA), Inc.**

Ann Arbor, MI / 2007 – 2008

- Senior Engineer plus Program Manager, Business Development, and Security in very small, high-tech R&D firm
- grew business by managing many (often concurrent) proposals for \$100K-\$750K cutting-edge research programs
- led team to develop and install plasma diagnostics hardware and software for prime on schedule and on budget
- advanced laboratory automation of motion and measurement equipment by developing tailored MATLAB software
- improved business analysis and strategy by developing customized spreadsheet tools in Excel and NeoOffice
- advised Principals and managed employees to enable company to survive massive economic downturn in 2008

### **General Dynamics Advanced Information Systems (GD-AIS), Inc.**

Michigan Research and Development Center (MRDC) / Ypsilanti, MI / 2004 – 2007

- Principal Scientist in Research plus Proposal Manager and Program Manager at 300-person specialized R&D site
- delivered Customer-contracted research for radio-frequency (RF), optical (EO/IR), and advanced sensor systems
- managed 12-person team and budget on challenging, \$1.5M Phase I program for passive RF guidance system
- grew business as leader of multi-functional proposal teams (~25 people), incl. for \$25M EO/IR R&D program win
- reduced overhead costs and risk to technical performance as site liaison to Corporate-wide IT security initiative
- utilized surplus resources to research and propose cross-functional collaboration system to improve operations

### **Solid Sound, Inc.**

Ann Arbor, MI / 2000 – 2004

- Audio Engineer plus highly multi-faceted role in small (~10 people), Customer-driven, deadline-critical business
- engineered diverse digital and analog audio projects to meet or exceed client expectations of quality and service
- drove sales and managed accounts by building personal client relationships in highly creative and volatile industry
- retained business through frequent “above and beyond” service to deliver client products on very tight schedules
- improved operations by developing studio contracts and pricing, internal processes, and facility upgrades
- adapted skills to business needs using Illustrator, UPS WorldShip, ProTools, and Peachtree accounting software

### **Environmental Research Institute of Michigan (ERIM)**

Ann Arbor, MI / 1995 – 2000

- Research Engineer plus technical leadership and IT support for industry-renowned, non-profit research institute
- led collection of unprecedented multi-sensor fusion data for landmine and unexploded ordnance (UXO) detection
- analyzed Synthetic Aperture Radar (SAR), EO/IR, and sensor fusion concepts using MATLAB, C, and UNIX tools
- expanded ERIM's exposure and Customer service portfolio by administering web pages and new IT capabilities
- maintained strong technical relationship with key Customer through long-term on-site assignment at their facility
- strengthened ERIM's industry recognition through publication and presentations at Customer facilities and events

### **Howard County Community College**

Mathematics Department / Columbia, MD / 2011 – 2012

- Adjunct Faculty in Developmental Education at college campus serving 20,000+ students
- taught pre-algebra and algebra to students facing challenges due to gaps in prior educational opportunities
- adapted educational techniques to motivate and encourage students requiring special support

### **Washtenaw County Community College**

Performing Arts Department / Ann Arbor, MI / 2003 – 2004

- Adjunct Faculty plus curriculum development at college campus serving 10,000+ students
- taught Audio Engineering to college and advanced high-school students in music and film production
- developed fully original, customized curriculum in audio theory eventually adopted by colleagues in other sections

### **Independent Performing and Recording Artist**

1995 – Present

- Principal, creative director, and dynamic contributor on wide variety of solo, ensemble, and distributed projects
- managed budgets and schedules for various recording projects with teams up to ~25 people and budgets to \$12K
- produced and managed contracted and independent live performances in intimate (<20) to large (350+) venues
- enabled diverse creative products via mastery of production and design for CD, vinyl record, and cassette formats
- promoted projects through writing, graphic design, and video for release to media, websites, and advertising
- founded and co-founded long-term projects, produced commissioned works, and co-produced client recordings
- created wide portfolio of music and audio works as composer, arranger, performer, engineer, and music director
- developed broad musical proficiencies incl. rock, folk, swing, a cappella, classical, electronica, and film scoring

## **SELECTED ACHIEVEMENTS & ACTIVITIES**

- 3-time Presenter/Author/Co-Author, Northrop Grumman Electronic Systems Symposium, 2012-2013
- 2-time Presenter, Northrop Grumman Engineering Tools Conference, 2010-2011
- 2 Performance Awards for Systems Engineering, USMC G/ATOR Program, Northrop Grumman, 2011-2012
- Excellence Award for Site Leadership, Corporate IT Security Initiative, GD-AIS, 2006
- Excellence Award for Proposal Management, DARPA SRVS Proposal, GD-AIS, 2006
- Audio Engineer and Sound Design on feature-length independent film ( *Once Brothers*, 2004)
- Engineer on Grammy-Award Nominee and #11 Billboard Blues Album ( *Lookin' For Trouble*, Kim Wilson, 2003)
- Counselor, Michigan Association for Deaf, Hearing and Speech Services (MADHS), 2000-2002
- Presenter/Author, Federated Laboratories Symposia, 1999, 2000
- Instructor and Chaperone, Crossroads Education Project, The Roeper School, 1998
- Eagle Scout, Class of 1991