

SENIOR AEROSPACE QUALITY ENGINEER

Profile

Six Sigma Black Belt:

Total Quality Management, SPC, QFD, Mistake-Proofing, Root Cause Corrective Action, Value Stream Mapping, Gage Capability, PFMEA, APQP, DFMEA, poka-yoke, Cpk, DMADV, QFD, SIPOC, COPIS, and CAPA.

Results-driven Mechanical Engineer with solid product engineering and QA experience.

Team-oriented Senior Quality Engineer with over five years experience developing and testing commercial and military turbines.

Skills

- Training program implementation
- The Mathworks MATLAB
- Quality control
- Energy management systems
- Engineering software
- Strong presentation skills
- Process improvement
- Operations research
- Reliability Testing
- Geometric Dimensioning
- Lean Manufacturing
- Physics
- Material Properties
- Leadership
- Team player
- Failure Analysis
- Product Engineering

Accomplishments

Product Improvement

- Liaised with MRB to modify and improve overall product performance.
- Eliminated machine defects through recommendation of machine adjustments.
- Statistical Analysis
- Performed data collection and statistical analysis that resulted in sound recommendations that were adopted by department.

Project Management

- Supervised project production efforts to ensure projects were completed to company standards, on time and within budget constraints.

Document Control

- Served as document control specialist to design micro precision apertures, sheet metal enclosures, membrane switches and cabling, while following proper standards.

Professional Experience

Senior Aerospace Quality Engineer

February 2009 to September 2014 Company Name 1/4 City, State

- Handled the authorization of all internal blueprint and UTC revision changes.
- Supervised the Non-Destructive Testing and ETL lab.
- Performed AS9102 First Article Inspections and prepare all applicable documents for submittal per AS 9100 standards.
- Directed Kaizen and Lean Manufacturing meetings weekly in front of an audience of about thirty engineers.
- Identify negative quality trends and initiate appropriate corrective/preventative actions.
- Lead project engineer of the JSF F-35 ramjet development stages.
- Any engineering changes required my prior approval.
- Review, authorize, and sign off all process routers making sure quality clauses and customer specifications are documented and acknowledged.
- Maintained Aerospace Quality Management Systems both internal and external.
- Collaborated with engineers and project managers regarding design parameters for client projects.
- Initiated statistical analysis project that resulted in sound recommendations adopted by entire department through Value Stream Mapping.
- Auditing experience with outside agencies and internal.
- Trained junior level Quality Engineers on how to properly organize FAIR packages and also taught them helpful Six Sigma methods.
- Handled all regulatory complaints from agencies such as the United States DoD and FAA and took appropriate corrective action.
- Progressive knowledge of the Codes of Federal Regulations as they pertained to GE Aviation.

Materials Program Manager

January 2005 to November 2009 Company Name i/4 City , State

- Focal point to Supplier Quality Assurance, Materials Control Lab, and Engineering Source Approval personnel to ensure the facility is compliant with procedures and audit requirements.
- Maintain constant liaison and communicate effectively with clients.
- Prepared accurate specifications for purchase of materials and equipment for purchasing department.
- Lead the program's supply chain activities, and advise the SCM Director on material strategies and plans.
- Reporting of unit reliability, repair costs, technical changes & investigations, repair shop capacity & performance metrics.
- Developed and lead supply chain proposal activities including task descriptions, bases of estimates, RFP solicitation, and cost and pricing.
- Develop the EAC (Estimate at Completion) and material forecasts by coordinating the collaborative inputs of the various elements of supply chain and finance.
- Participate in Daily Management and prepare reports and corrective actions for Key Performance Indicators (KPI) in advance of monthly review.
- Exert influence and have an effect on the overall objectives and long-range goals of programs and be an influencing member of the IPT (Integrated Product Team) team.
- Strict adherence was followed using both customer and Aerospace standards.
- Write reproduction procedures for any anomalies encountered, and generate comprehensive reports.
- Demonstrate experience in manufacturing and continuous improvement tools.
- Exert influence and have an effect on the overall objectives and long-range goals of the program and the program IPT team.
- Working knowledge and training in Supply Chain Management, contract law, FAR/DFAR as it relates to Government contract
- Directed customer installations maintaining cost efficiencies based on space and power allocation.
- Resolved part and assembly discrepancies.

Mathematics and Physics Tutor

January 2002 to May 2005 Company Name i/4 City , State

- Educate students on how to solve mathematical equations using formulas and proofs, and in addition, using technology, including the TI series calculators, MATLAB, and Minitab.
- Tutor mathematical topics including Calculus 1, 2, 3, Differential Equations, Partial Derivatives, Statistics, Stochastic and Advanced Calculus, Discrete Mathematics, Linear Algebra, Number Theory, Finite Element Analysis, Lie Super-Algebra, Fluid Mechanics, Applied Physics, Solid State Physics, and Real Analysis.
- Additionally, I worked with engineering students prepare for the FE Exam and actuarial students prepare for their first four professional exams by appointment.

Related Coursework

Ph.D : Theoretical Physics , 2010 Massachusetts Institute of Technology i/4 City , State , USA GPA: H.Y. Loh Award Scholarship National Defense Science and Engineering Graduate (NDSEG) Fellowship and Scholarship Approved Dissertation: Measurement of the Z Boson Transverse Momentum Distribution at the Tevatron.

National Defense Science and Engineering Graduate (NDSEG) Fellowship and Scholarship

Approved Dissertation: Measurement of the Z Boson Transverse Momentum Distribution at the Tevatron.

Dean's List

Summa Cum Laude

M.B.A : Econometrics , 2007 MIT Sloan School of Management i/4 City , State , USA GPA: Dean's List GPA: 4.0/4.0

Coursework in identifying areas of positive and negative private sector aerospace fluctuations.

Emphasis on long-range military spending and to whom the funds are allocated to.

GPA 4.00/4.00

M.S : Applied Physics , 2005 Massachusetts Institute of Technology i/4 City , State , USA GPA: Summa Cum Laude Dean's List GPA: 3.97/4.00 Pi Kappa Chapter; MechE Honor's Society Dissertation: Studies of Ultrafast Structural Dynamics In Metals

Summa Cum Laude

Dean's List GPA: 3.97/4.00

Pi Kappa Chapter; MechE Honor's Society

Advanced coursework in physical applications to aviation.

Dissertation: Studies of Ultrafast Structural Dynamics In Metals

Bachelor of Science : Mechanical Engineering , 2002 Massachusetts Institute of Technology 1/4 City , State , USA GPA: Summa Cum Laude
Dean's List Pi Kappa Chapter; MechE Honor's Society GPA: 3.94/4.00

Summa Cum Laude

Dean's List

Pi Kappa Chapter; MechE Honor's Society

GPA: 3.94/4.00

Advanced coursework in Mathematics

Lean Six Sigma Black Belt; 2008 Lean Six Sigma Green Belt; 2007 Villanova, PA 19085 Villanova University 1/4 City , State
Black Belt : Six Sigma , 2008 Villanova University 1/4 City , State , USA

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Ph.D : Theoretical Physics , 2010 Massachusetts Institute of Technology 1/4 City , State , USA GPA: Dean's List GPA: 3.91/4.0 Graduate
Student Council of the Massachusetts Institute of Technology Physics Department Representative Sigma Pi Sigma National Honor Society

Mechanical Engineering With a Concentration on Aerospace Modeling and Design; Undergraduate

Analysis of Particle Kinetics and Heat Transfer Variability in Fluidized Bed Processing; Undergraduate

Analysis of 3-D Contact Mechanics Problems by the Finite Element and Boundary Element Methods; Undergraduate

Advanced Composite Materials Research for Air and Ground Vehicles; Undergraduate

Meta-control of Combustion Performance with a Data-mining Approach; Undergraduate

Hydrodynamic Instability at High Energy Density; Post Graduate

Topology of Birational Manifolds and Applications to Degeneration; Post Graduate

Blast-Wave-Driven, Multi-Dimensional Rayleigh-Taylor Instability Experiments; Post Graduate

Effective Field Theory and D Grand Unified Model; Post Graduate

Transitory Control of Separated Shear Layer using Impulsive Jet Actuation; Post Graduate

Affiliations

American Mathematical Society; Member Connecticut and Western Massachusetts Chapter of Mensa; Member Knights of Columbus; 3rd
Degree Knight American Physical Society; Member American Society For Quality - Certified Quality Improvement Associate Connecticut
Academy of Science and Engineering; Member American Institute of Aeronautics and Astronautics; Member Board of Directors; HARC Inc.
American Society of Mechanical Engineers

Personal Information

Euler-Mascheroni constant A transcendental number is a number (possibly a complex number) which is not algebraic-that is, it is not a root of a
non-constant polynomial equation with rational coefficients. Originally created by Leonhard Euler in his paper, titled De Progressionibus harmonicis
observationes in 1735, represented by the Greek letter Gamma, γ , Euler valued γ at .5772. Mathematicians for 278 years have not been able to
prove the Euler-Mascheroni constant is transcendental. I developed an infinite sum series while also making use of the Taylor Polynomial, proving
the Euler-Mascheroni constant is a transcendental number. Fields Medal candidate. Nobel Laureate candidate for work in Physics. The
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Skills

3-D, Approach, auditing, calculators, continuous improvement, Data-mining, Derivatives, engineer, ETL, finance, Government, ISO, ISO 9001,
law, Director, Materials, Mathematics, MATLAB, meetings, Minitab, Modeling, personnel, Physics, pricing, Proofing, proposal, Quality, Quality
Assurance, Reporting, Research, RFP, routers, Six Sigma, SPC, Statistics, supply chain, Supply Chain Management

Additional Information

- PUBLICATIONS: Euler-Mascheroni constant A transcendental number is a number (possibly a complex number) which is not algebraic-that is, it is not a root of a non-constant polynomial equation with rational coefficients. Originally created by Leonhard Euler in his paper, titled De Progressionibus harmonicis observationes in 1735, represented by the Greek letter Gamma, γ , Euler valued γ at .5772. Mathematicians for 278 years have not been able to prove the Euler-Mascheroni constant is transcendental. I developed an infinite sum

series while also making use of the Taylor Polynomial, proving the Euler-Mascheroni constant is a transcendental number. Fields Medal candidate. Nobel Laureate candidate for work in Physics. The Association of American Publishers Copyright 2012