

EDUCATION

UNIVERSITY OF SOUTHERN CALIFORNIA

Master of Science - Engineering Management (Industrial & Systems Engineering) - Graduated: May 2010, GPA: 3.710

UNIVERSITY OF COLORADO AT BOULDER

Bachelor Of Science - Aerospace Engineering Sciences - Graduated: May 2009

EXPERIENCE

ENGINEERING PROJECT MANAGER, HEALTH TECHNOLOGY, APPLE INC.

2014-Present

- Drive development of early stage R&D projects primarily in health/wellness/fitness/medical technology; identify & define priorities, risks, scope of work, schedule, & budget for advanced engineering concepts.
- Assist in development of top-level system architecture & guide design decisions on advanced technology concepts.
- Coordinate/conduct human studies through all stages of the research lifecycle - from definition to analysis.
- Understand & communicate project status/information between cross-functional teams & management.
- Coordinate design processes to ensure designs meet intended project goals.
- Drive suppliers/vendors, integrating deliverables & schedules into projects.

PROGRAM MANAGER, DREAM CHASER SPACE SYSTEM, SIERRA NEVADA CORP

2012-2014

- Provided centralized planning, direction & control required to meet cost, schedule, & technical performance goals throughout the life cycle of the Dream Chaser Space System, a \$300M+ next-gen NASA-contracted space shuttle.
- Lead fast-paced trade studies, feasibility analyses & cost/schedule estimates for advanced program business development and proposal efforts.
- Designed, implemented, managed & tracked top-level program & detailed vehicle integrated master schedules.
- Rapidly identified & mitigated programmatic issues within engineering, manufacturing, test/verification, procurement, subcontracts & schedule/budget management.
- Lead proposal effort on multi-billion dollar NASA Commercial Crew Transportation Capability (CCtCap) RFP

COST SYSTEMS ENGINEER, NASA JET PROPULSION LABORATORY

2010-2012

- Developed complex cost engineering estimates for competed proposals & directed space missions/instruments.
- Worked on proposal teams supporting advanced system design/concepts/configuration, risk assessment/analysis/mitigation, & production of all relevant proposal documents.
- Designed/developed software tools including parametric/analogy based cost models & marginal sensitivity analysis tools for engineering design trades.
- Created/maintained project WBSs, manage responsibilities & interface with partnering organizations.

CONSULTANT, SPACE SCIENCE & EXPLORATION CONSULTING GROUP

2009-2010

- Produced white papers that framed mission architecture & science requirements for proposed planetary missions.
- Performed quality assurance for planetary spacecraft IRAD products associated with the Space Science customer community.
- Developed concepts that met specific requirements for planetary science mission design.
- Developed customer briefings & formulated product packaging & delivery concepts.

CO-FOUNDER/LEAD SYSTEMS ENGINEER, KYG SYSTEMS, LLC.

2009-2010

- Participated in founding of a small aerospace R&D company focusing on advanced UAV/UAS technologies.
- Led proposal writing efforts for SBIR/STTR funding.
- Performed IRAD studies in conceptual design, system/subsystem development, risk/cost/market/feasibility analysis, prototyping & testing.
- Worked closely with project advisers including professors, professionals, incubator organizations & industry POCs.

RESEARCH ANALYST, NORTH SOUND CAPITAL, LLC. (HEDGE FUND)

Summer, 2008

- Discovery/research of financial institutions, investment banks, asset management firms, etc.
- Developed software tools using platforms such as Bloomberg, SNL Financial, MS Excel, VBA & MATLAB.
- Represented company in meetings with top financial corporations.
- Created and maintained complex financial models.

ACHIEVEMENTS

- Graduated high school four years early; earned master's degree at age 19.
- Winner, NASA Cost Estimating Team of the Year Award, 2011.
- Founded multi-national 501(c)(3) website helping to connect nearly 50,000 sperm/egg donors and offspring.
- Achieved solo level in glider aircraft on Mile High Youth Gliding Scholarship.

COMPUTER

Highly Proficient: MATLAB, Satellite Tool Kit (STK), SolidWorks, Microsoft Office, Advanced Aircraft Analysis
Some Experience: C, UNIX, VBA, Python, Adobe CS, Crystal Ball, PowerFlow, SAP R/3, SysML, ANSYS

Ryan Kramer

RELEVANT ADVANCED COURSEWORK

- Thermodynamics; using the text "Introduction to Thermal Systems Engineering" by Moran.
- Aerodynamics; using the text "Foundations of Flight" by Anderson and "Foundations of Aerodynamics" by Chow.
- Statics, Structures & Materials (including FEA); using the text "Mechanics of Materials" by Vable.
- Aircraft Flight Dynamics; using the text "Aircraft Flight Dynamics" by Schmidt.
- Orbital Mechanics & Attitude Dynamics; using the text "Orbital Mechanics: For Aerospace Engineering Students" by Curtis.
- Electronics & Communications; using the text "The Art of Electronics" by Horowitz.
- Aircraft Design; using the text "Airplane Design" by Roskam.
- Material Science Engineering; using the text "Essentials of Materials Science and Engineering" by Askeland.
- Foundations of Propulsion; using the text "Elements of Propulsion" by Mattingly.
- Energy & Power for a Sustainable Future; using the text "Sustainable Energy" by Tester.
- Project Management; using the text "Project Management: A Managerial Approach" by Merideth.
- Entrepreneurial Business Planning Preparation; using the text "Writing a Successful Business Plan" by Lawrence.
- Leadership; using the text "The Art of Leadership" by Manning.
- Advanced Engineering Economic Analysis; using the text "Advanced Engineering Economics" by Park.
- Engineering Management of Government Funded Programs; using the SAE550 course reader.
- Law & Finance for Engineers; using the ISE565 course reader.
- Management of Engineering Teams; using the text "Managing Teams" by Holpp.
- Strategic Management of Technology; using the text "Technology Strategy for Managers and Entrepreneurs" by Shane.
- Enterprise-wide Information Systems; using the text "SAP R/3 Business Blueprint" by Curran.
- Operations Research; using the text "Operations Research" by Taha.
- Initial Systems Engineering on Competed Missions using institutional training materials.
- Introduction to Model Based Systems Engineering using institutional training materials.
- Fundamentals of STK using institutional training materials.
- Preparing Proposals for Competed Space Missions using institutional training materials.