

SETH MURRAY, BS, MEng, PhD

WORK EXPERIENCE

University of Colorado Faculty - Engineering Management Program - January 2009 – Present

Teaching:

- Online and in-person instructor for 90+ course sections including 2,500+ enrollments in courses titled: Engineering Economics, Leadership and Professional Skills, Engineering Projects, Invention and Innovation, Engineering Entrepreneurship for the Developing World, and Product Development

Honors and Distinctions:

- Won the Frank Moyes Award which is given to the faculty or staff member that's had the most impact on entrepreneurship & innovation across CU Boulder
- Nominated for the Peebles Innovation in Education award

Service:

- Instrumental in the creation and growth of Eship (now Escend) – entrepreneurship and undergraduate Engineering Management education
- Organized an advisory board for Eship to guide and donate funds
- Managed budgets and planning for Eship program growth
- Conducted surveys for Eship program for course review and creation
- Served on undergraduate and graduate committees
- Led online marketing in 2010 and 2011 which grew graduate enrollment by 27%
- Served for three semesters on the Diversity, Equity, and Inclusion (DEI) Committee
- Recruited students at the Engineering Sampler and Admitted Students Day
- Attended and presented at undergraduate committee and industry advisor meetings
- Mentored engineering students with their business development for mechanical, electrical, and computer science applications
- Judged business plan competitions and guest speaking
- Attended entrepreneurial events and meetings for industry and campus outreach
- Serving as the Faculty Director for the student group CU ASEM

Publications:

- *Differences in Learning Outcomes and Engagement Across Traditional, Blended, and Online Engineering Management Undergraduate Courses*, ASEE, 2017
- PhD dissertation: *A Systems Approach for Resource Management for Dairy Farms in the Highlands of Peru*, 2020.
- In-progress: *A Tool for Maximizing Profits as a Gig Economy Driver*

Grants:

- Worked in Peru five times and Nicaragua once - under three grants from the National Collegiate Inventors and Innovators Alliance (NCIIA)

University Program Director at Bridges to Prosperity

February 2011 – January 2012

- Managed 12 university teams to construct footbridges in Nicaragua, Haiti, and Bolivia
- Reviewed grant applications for design-build live steaming footbridge traffic counting
- Expanded the chapter support with financial planning and educational resources

VP of Business Development for TechoShark, Inc. Boulder, CO

January 2009 – December 2009

- Assisted in the Hoozat app development and launch in the Apple App Store
- Developed financial and marketing plans for NSF SBIR grants
- Partnered with VCs, Angels, and industry advisors at the Boulder Innovation Center

Engineer/President/Founder of Splitter Gear, Inc. and Inventista, Inc. DBA Belle Baby Carriers
Boulder, CO

October 2000 – May 2011

- Founded, operated, and sold two companies
- Raised investment money and used CRMs, QuickBooks, Peachtree (Sage 50cloud), and a custom-built software for financial statement reporting and modeling
- Established large accounts such as Target, Nordstrom, Amazon, and 200+ other stores domestically and 12 distributors internationally
- Managed employees in sales, PR/marketing, manufacturing, & order fulfillment
- Attended 30+ trade show with booths for products with **Patents 655,494 and 6,736,359**

Engineer/Product Manager/Buyer at Great Trango Holdings, Inc. Boulder, CO

January 2003 – January 2006

- Managed the quality, design, and purchasing of 200 climbing hardware products from 18 domestic and five international manufacturers
- Awarded **Patent 6,843,346** and managed the development of **Patents 6,375,139, 6,510,599, 5,860,629, and 466,794**
- Managed six contractors for web development, manufacturing, and stress analysis

Engineering Intern at Terumo Blood and Cell Technology, Lakewood, CO

May 1999 – August 1999

- Designed and tested a modification to a disposable set for collecting red blood cells
- Tested and helped validate new designs for the manufacturing department

SKILLS

System Modeling

- Stella Architect software – trends, optimization, and sensitivity analysis
- Predictive modeling for operations, marketing, population growth, epidemiology, resource management, economics, etc.

CAD

- AutoCAD, SolidWorks, MasterCam, and Cosmos finite element analysis

Economics

- Excel - financial statements, time value-of-money, statistics, project selection, accounting, portfolio analysis, etc.

Management

- Project and business planning
- Product development
- Accounting
- R&D portfolios

Operations

- CRMs and accounting
- Inventory management
- Supply chain and distribution
- Life cycle analysis
- Statistical process control
- Manufacturing

EDUCATION

University of Colorado at Boulder

- BS, Mechanical Engineering with Biomedical Option - 2001
- MEng, Engineering Management -2006
- PhD, Civil Systems - 2020