KENNETH D. SALTER, P.E.

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Pasadena, CA 91103

SUMMARY

Systems Engineer with extensive experience on complex projects involving vehicles, large structures, actuated mechanisms, automation, and motion control.

- Systems engineering and motion control - Architecture and integration of large electro-mechanical systems.
- Project management - Leadership of multidiscipline engineering teams.
- Functional management - Mentoring and talent development; process, methods, and tools.
- Prototype development - Design and testing of electric vehicles, camera rigs and motion control systems.
- Engineering analysis - Modeling and simulation, Matlab/Simulink, and multibody dynamics.

PROFESSIONAL EXPERIENCE

KEN SALTER MOTIONEEERING, INC., Pasadena, CA **2005 to Present**
Provides motion control, systems engineering, and project management services.

Industries and Applications:

- Advertising - special effects and stunts for television commercial.
- Broadcasting - wire suspended motion control camera rig.
- Computing - transportable, modular data center.
- Construction Equipment - vehicle for transporting houses.
- Public Art/Sculpture - large complex engineered public art works with moving elements and steam.

WALT DISNEY IMAGINEERING, Glendale, CA **1990 to 2005**
Designs and builds Disney theme parks and resorts, worldwide.

Executive Director, Hong Kong Disneyland Expansion (2004-2005)
Planned and produced concept designs for new rides.

- Led team of engineers to produce concept designs and estimates for three planned rides resulting in specifications, drawings, analysis, and simulation.
- Identified customer needs and negotiated technical requirements leading to customer understanding and approval of specifications.

Executive Director, Systems Engineering (2000-2004)
Established and managed systems engineering department.

- Developed and taught systems engineering methods that brought clarity and consensus to requirements and technical decisions on multiple projects.
- Introduced requirements management. Streamlined processes for bid, design review, and acceptance testing of theme park rides.
- Hired, acquired, and grew systems engineering talent. Systems engineers were highly effective as evidenced by superior rankings, director level promotions, and feedback from project teams.

Technical Director, Show/Ride Engineering (1996-2000)
Technical Director for two portfolios of theme park projects.

- Assembled international team of engineers for design, procurement, and implementation of rides for Paris theme park. Established and negotiated requirements, developed procurement strategies, negotiated contracts, established schedules and budgets, and led engineering team during design and bid phases.
- Formed and led multidiscipline teams in simultaneous development of five sophisticated interactive rides. Produced, tested, and installed rides on-time and on-budget, which received patent and two industry awards.

Principal Engineer, Ride Development (1990-1996)
Developed "blue sky" ride concepts. Worked with artists, architects, production designers, and project managers to create exciting, technically feasible, and financially viable attractions.

- Invented and demonstrated prototype wireless automatic guided ride vehicles for next generation of dark rides. Sold the concept to two project teams and to Japanese partners. Resulted in Pooh's Hunny Hunt, the most popular attraction in Tokyo.
- Developed and patented novel propulsion system for GM Test Track ride at Epcot.

HUGHES ELECTRONICS, SPACE AND COMMUNICATIONS, El Segundo, CA **1984 to 1990**
Built communication satellites. Also provided systems engineering services to General Motors.

Spacecraft and Automotive Systems Engineer (1985-1990)
Analyzed and simulated attitude dynamics of communication satellites. Developed hardware-in-the-loop simulation for Corvette with active suspension.

Propulsion Engineer (1984-1985)
Developed CAE tool for selection of propulsion system heaters. Designed injectors for bipropellant thrusters.

EDUCATION

M.S., Mechanical Engineering (Dynamics and Control)
University of California, Los Angeles, 1985-1987

B.S., Mechanical Engineering
University of California, Berkeley, 1979-1983

LICENSES

Registered Professional Engineer, California
Mechanical Engineering, No. M 26285, 1989-Present

PATENTS AND PAPERS

Roller Coaster Simulator, 1999 (US 6,007,338)

Interactive Guided Vehicle Amusement Ride, 1997 (US 5,629,595)

Conveying Device with Self Steering Powered Caster, 1999 (US 5,590,605)

Platen Drive Unit, 1995 (US 5,402,730)

Systems Engineering and Theme Park Development;
Proceedings from the 12th Annual International Symposium
of the International Council on Systems Engineering, 2002.
Presented at plenary session of the symposium.