R. Winston Larson
Data science. Business. Engineering.

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EDUCATION

Massachusetts Institute of Technology

SM Mechanical Engineering, *January 2014* - Major GPA: 5.0/5.0
Relevant coursework: Computer science and eng., sustainable manufacturing, innovation strategy, entrepreneurship.

Master's Thesis, *2012-2014* - **MIT Presidential Fellow**
Strategic and Financial Implications of Unmanned Underwater Vehicles and Long-term Underwater Power Sources.

SB Mechanical Engineering, *June 2012* - GPA: 5.0/5.0
Relevant coursework: Systems engineering, programming, robotics & controls, product design & dev, manufacturing.

Research projects: Bio-mimetic underwater robotics, networked indoor robot navigation, firearms identification for Boston Police, compact fusion power for spacecraft

EXPERIENCE

Innovation Consultant, *Innosight 2014-2015*
Assisting Fortune 500 companies to respond to disruptive innovation as an innovation consultant.
- **Biotech Computing:** Managed the design of a cloud-based computational platform for biotech R&D.
- **Pharmaceutical R&D:** Created new R&D accelerator and launched its first project at a major pharma.
- **Energy & Water:** Launched strategic initiative in water at an electric utility in California.
- **Consumer Electronics:** Devised R&D strategy for a new product line being launched by a consumer company.
- **Semiconductor Manufacturing:** Advised assessment and expansion of capabilities at an electronics company.
- **Internet of Things:** Facilitated a symposium examining opportunities and challenges in the Industrial Internet.

Unmanned Underwater Vehicle (UUV) Projects with Lincoln Laboratory, *MIT 2011-2014*
Engineering, technical documentation, and financial management

Boeing Company, *Summer 2012*
Manufacturing and Robotics Engineering Intern

Schlumberger Limited, *Summer 2011*
Manufacturing Engineering Intern

DATA SCIENCE PROJECTS

Predicting content value for advertising, *2016*
Built regression model to correlate content with ad value. Used SQL and Python to process over 250 million samples.

BRFSS diabetes and demographics, *2015-2016*
Built machine learning model to predict diabetes based on behavior. Cleaned demographics data for 30 years of BRFSS.

Venture portfolio simulation, *2014-2015*
Built Monte Carlo simulation of a large venture portfolio over 10 years to guide investment and management strategy.

Patent valuation, *2014-2015*
Scraped hundreds of thousands of patents from the USPTO website and structured data to estimate patent values.

SKILLS

Technical: Python (pandas, scikit-learn, regex), Matlab, Java, web scraping, machine learning, data wrangling, linux/bash, HTML/CSS, modeling, systems engineering, manufacturing, SolidWorks, product design and development, electronics.

Business: Communications, presentations, and writing, team & technical project management, financial modeling, strategy & business development, disruptive innovation, entrepreneurship & startups.