

IOANA LUPASCU

HUMAN CENTERED DESIGN & ENGINEERING | **LEADING WITH EMPATHY**

Design oriented systems engineer with 12 years of industry experience across the product lifecycle in start-up, academic, and large corporate environments. I have used Agile and Waterfall methodologies to gather user stories and requirements, define testing strategies, and test/launch software products. My creativity and outgoing nature have driven my entrepreneurial pursuits in video production. I am now seeking a role where I can apply my high empathy, design-oriented approach to technical communication with users, internal and external teams, and potential investors. www.sparkintuit.com.

PRODUCT MANAGEMENT IN SYSTEMS ENGINEERING

Process Engineer, LIMS

Natera, San Carlos, CA

09.2016 – 06.2017

- Drove user story research and requirement definition by leading weekly cross-functional meetings and interviews with lab automation, project management, and software engineering teams to define LIMS needs
- Used visual design tools to define user needs and mock up lab process workflows for integrating cloud-based LIMS software with automated high-throughput automation processes
- Managed communication of process modifications from Automation to Software Engineering group
- Tracked Issues during Agile software development process in issue management software, JIRA and Confluence

Sr. Systems Engineer

Roche, Pleasanton, CA

12.2015 – 08.2016

- Worked with quality, business/ lab, and software development stakeholders across US and European sites to define testing strategies for integrated automated software/hardware diagnostic devices
- Applied both Agile software development methodologies and Waterfall requirements management practices in management of various software testing activities, employing formal requirement management tools like HP-ALM
- Used Scrum methodology and Kanban board to prioritize software features for test and optimize testing workflow

Systems Engineer

Novartis Companion Diagnostics, Cambridge, MA

02.2013 – 12.2015

- Led Cross-Functional Kaizen Continuous Improvement workshops to iterate internal data handling processes
- Led Usability and Voice of Customer activities to translate internal user stories into LIMS system requirements
- Managed resources, assembled, and energetically led a cross-functional LIMS Core Team of engineers, biostatisticians, scientists, and program managers in defining laboratory data management software requirements
- Managed communication with software developers in US and Germany during user input, testing, validation and documentation of software requirements for diagnostic qPCR-based molecular assay result analysis software
- Wrote all software test plans, defined testing procedure, trained staff and managed execution of testing
- Worked with engineering teams to establish relevant assay parameters throughout development and testing
- Led and contributed to risk-assessment activities, pFMEA and usability FMEA, championing for risk based assignment of critical software features throughout the product development lifecycle

BioEngineer

On-Q-ity, Inc. Waltham, MA

08.2009 – 02.2012

- Led user interviews to gather requirements and design a web-based database to monitor production variables
- Worked with team of scientists and engineers to develop a microfluidic tumor cell capture device
- Worked with team of engineers to optimize antibody imaging of Circulating Tumor Cells using MATLAB analysis
- Supervised manufacturing associates and technicians on manufacturing protocols

VISUAL STORYTELLING + CREATIVE EXPERIENCE

Founder, Freelance Video Production

SparkIntuit.com, Medford, MA

02.2012 – 06.2014

- Energetically reached out to Boston community to produce short films for socially conscious engineering clients
- Start-up business development, audio/video process set-up, website design, client and partner outreach
- Engaged clients with high empathy to create story boards and video scripts that capture the essence of their work
- Video: Produced all videos; edited/rendered final cuts (Adobe Premiere); created animations (Adobe Aftereffects)
- Sound: Worked with local musicians to generate original soundtracks for short films; recorded all voiceovers
- Projects: On-Q-ity, Pure Home Water Ghana: MIT Department of Civil Engineering, public speakers

Scientific Video Editor

JOVE (Journal of Visualized Experiments) Cambridge, MA

12.2012 – 02.2013

- Edited scientific video content in FinalCut Pro to align with scripts, for online peer-reviewed scientific video journal
- Used Motion graphics to generate basic animation for short films highlighting laboratory experiment processes

RESEARCH + DEVELOPMENT EXPERIENCE

Researcher

Boston University, Collins Lab: Applied BioDynamics, Boston, MA

08.2005 – 05.2009

- Contributed to development of MATLAB computer model to analyze clinical trial data for balance control study
- Researched the effects of stochastic resonance applied to mechanical vibrations on balance control
- Designed, constructed, and implemented vibrating insoles in clinical trials at Hebrew SeniorLife Hospital
- Successfully designed and coupled a threshold-based gene toggle switch to a molecular counter in E. Coli
- Created visual presentations and animations to present findings to audiences of various technical levels

EDUCATION + CERTIFICATIONS + PATENTS

BOSTON UNIVERSITY College of Engineering | B.S. Biomedical Engineering | class of 2009

Honors: Trustee Scholar Full Academic Merit Scholarship, Engineering Scholar, Siemens Scholar

PATENTS

Circulating tumor cell capture on a microfluidic chip incorporating both affinity and size. WO2012094642 A3. 2012.

SKILLS

Leadership: Human-centered facilitative leadership style focused on effective relational processes, strong interpersonal and verbal communication skills, Coverdale Team Effectiveness Training, Kaizen leadership principles

Product Development: User Story definition, Agile development, Scrum, Kanban, Waterfall, Smartsheet.

Systems Engineering: Change & configuration management, Systems Thinking, Design Control, Signal Processing, Statistical Process Control, Risk Management, FMEA, Verification and Validation of devices & software

Visual Design & Film Production: Adobe Premiere, Photoshop, Adobe AfterEffects, Final Cut Pro, Motion, Balsamiq

Biomedical: NGS, Sanger Sequencing, DNA/RNA Extraction, qPCR, Genetic engineering/ synthetic biology

Languages: English (fluent), Romanian (fluent), German (basic) // **Computer:** C++ (basic), MATLAB (basic)

ACTIVITIES/ COMMUNITY SERVICE

Board of Directors, Webmaster, Team Captain: San Carlos Tennis Club, 2017

Volunteer: Creative Teachers of Massachusetts, 2012-2013

Volunteer: Arlington Community Media Center (Cable Access Television), 2012

Vice President: Boston University Engineering Government Executive Board, 2009

Co-Founder: Boston University Romanian Student Association, 2006 – 2009