

Contact

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www.linkedin.com/in/

shawnhandran (LinkedIn)

vizualize.me/shandran (Other)

Top Skills

Data Analytics

ChatGPT

Generative AI

Languages

Mandarin (non-fluent)

Certifications

Accredited Interscholastic Coach
Level 1

R Programming A-Z™: R For Data
Science

Python Data Visualization: Plotly and
Dash

Python Data Analysis & Visualization
Certificate

Publications

Spatial Distribution and Coexistence
of *Klebsiella pneumoniae* and
Pseudomonas aeruginosa in Biofilms

Ionized intracellular calcium
concentration predicts excitotoxic
neuronal death: observations with
low-affinity fluorescent calcium
indicators

Huntington's Disease: New Progress
(Workshop Report)

Abnormal calcium homeostasis
and mitochondrial polarization in a
human encephalomyopathy

What's Killing Neurons in
Huntington's Disease (Workshop
Report)

Shawn Handran

Consultant in statistics, data analytics, marketing, and business
strategy

Fremont, California, United States

Summary

I love designing and performing experiments, analyzing data, and creating compelling stories that relate individual experimental results to the larger narrative of the worldwide scientific endeavor. My goal as a teacher is to make science education as practical and hands-on as possible—having students themselves design, perform, analyze and interpret their own experiments.

Experience

S:H Consulting

Consultant

September 2023 - Present (1 year 9 months)

San Francisco Bay Area

Consulting services in data analytics, strategy, marketing, scientific writing, curriculum and pedagogical development. Statistical and data analytics support include: Quality of Life in Canine Patients Undergoing Treatment for Brain Tumors (Univ of Edinburgh), and A Historical Sociolinguistic Study of Paleo-Hebrew Script in Second Temple Period Judea and Samaria (Columbia International University). Editorial support example includes: A Comprehensive Database of HiChIP Regulatory Interactions (Stanford University). Marketing and business strategy consultations for Tu Design and Estex Precision.

Bedford, Freeman & Worth High School Publishers

Teacher Advocate

February 2021 - December 2023 (2 years 11 months)

California State University - East Bay

Adjunct Faculty Instructor

July 2019 - December 2023 (4 years 6 months)

San Francisco Bay Area

Part-time adjunct instructor of Statistics, and Pre-Professional Health Academic Program.

Stanford University
Visiting Teacher
May 2022 - March 2023 (11 months)

ETS
AP Reader
June 2019 - March 2023 (3 years 10 months)

Fremont Christian School
AP Statistics and STEM Teacher
October 2012 - August 2022 (9 years 11 months)
Fremont, California

- > High school science and statistics teacher for Biology, Physics, AP Biology, Biotechnology, and AP Statistics
- > Head of Science Department, 2014-2018
- > Head of school-wide Science Fair Expo, 2014-2016
- > Winter interim short course teacher for Forensic science (2014), Standardized test preparation (2015), and Electron and Light Microscopy (2016-2018)
- > Workshop Presenter at Society for Science and the Public Science Teacher Conference, "Beginner's Guide to Getting Public Datasets into the Classroom." October 16, 2015, Washington DC
- > Expertise in teaching laboratory techniques including liquid handling, solution preparation, sterile technique, bacterial transformation, gel electrophoresis, restriction enzyme cloning, DNA isolation and purification, restriction fragment length polymorphism analysis, PCR, UV and visible light spectrophotometry, colorimetric assays, SDS-PAGE, light microscopy, wet-mount preparation, histology
- > Expertise in teaching students Microsoft Office, Google Apps, Minitab, Tableau Public, Gapminder, StatCrunch, and lab acquisition software in laboratory or classroom setting
- > Expertise in Renweb, Moodle, Google Classroom, and Badge List education platforms
- > Guided Language Acquisition Design (GLAD) certified, 2013-present
- > Head Coach, Girl's Volleyball, 2014
- > Assistant Coach, Track and Field, 2014-present
- > NFHS Certified Interscholastic Coach Level 2
- > USATF Level 1 Coach (and coach of a 2015 Junior Olympian)
- > Class advisor 2013-2016
- > American Cancer Society Club Advisor, 2015-2016

Ohlone College
Adjunct Instructor
May 2018 - August 2018 (4 months)
Fremont, California

Adjunct instructor for Introduction to Biology for Pre-Health Sciences and non-Biology majors.

Gotta Go
Director of Partnership Development
August 2008 - November 2011 (3 years 4 months)

> Conducted foundation research, prepared grant proposals and financial partnership invitations > Prepared business plan with cash flow and break-even analysis for potential donors interested in investing in two social entrepreneurial business ventures > Raised \$251K in donations, grants and personal support during tenure > Communicated vision and impact of organization with individuals, small groups, businesses, churches and schools > Networked with like-minded individuals and organizations for partnership opportunities, volunteer placement, information sharing and referrals > Visited team members in Asia and conducted training seminar on relationships and life skills

Tu Design
Editor
June 2007 - December 2008 (1 year 7 months)

Served as the Editor-in-Chief for TUNE, a quarterly newsletter produced by Tu Design

Molecular Devices
3 years 9 months

Director of Marketing
September 2006 - May 2007 (9 months)

> Product evangelism and brand messaging for emerging or innovative technologies in image-based cell screening assays > Responsible and accountable for product portfolio and expenditures budget > Developed champion and thought-leader relationships with scientists in academic, pharmaceutical and CRO sectors > Quantitative market research > Strategic planning > Go-to-market preparedness > Set strategic vision for product portfolio > Speaker at product workshops in US, Japan, China, and Singapore > Trained sales personnel in the Great Demo! method > Developed Excel analysis tools for corporate leadership for gross margin and historical

performance analysis of product lines > Led New Product Introduction team consisting of members from multiple departments

Product Marketing Manager

September 2003 - August 2006 (3 years)

> Product manager for innovative technology used in ion channel drug discovery, cell-based screening, and cardiovascular (hERG) safety screening and profiling > Developed relationships with thought-leaders and scientists in ion channel drug discovery at Amgen, AstraZeneca, BioFocus, ChanTest, Cytomyx, GlaxoSmithKline, Icagen, Merck, Pfizer, Purdue Pharma, Roche, and Schering-Plough > Co-organized automated electrophysiology user meeting (Biophysical Society Satellite meeting, 2005-2006) > Scientific advisor for pharmaceutical drug discovery meeting (SRI, 2004-2005) > Co-author on scientific paper describing innovative technical advance in ion channel screening (see full text article below) > Organized and hosted WebEx webinars > Developed Excel tool for ROI and break-even analysis > Script writer and creative lead for product animations > Copywriting/editing for all marketing collateral (ad, print, web) > Co-developed MS Access customer database

Axon Instruments

Product Line Manager

June 2000 - March 2003 (2 years 10 months)

> Performed due diligence and market research in innovative in vitro diagnostic (IVD) opportunities using DNA microarray technology that provided executive management with information to make informed and actionable decisions > Evaluated microarray technology for M. tuberculosis antibiotic resistance > Established collaboration to use laser scanner device for intraoperative biopsy analysis in Mohs skin cancer surgery (see: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756582/pdf/nihms87304.pdf>) > Succeeded in campaign to establish product file format as the industry standard > Primary liaison on co-development project with partner company using innovative silicon-based technology for protein microarrays > Co-authored book chapter on image analysis considerations in DNA microarray data analysis

Washington University in St. Louis

Guest Lecturer, Lecturer and Teaching Assistant

January 1994 - December 1997 (4 years)

> Guest lecturer for adult evening class Introduction to the Nervous System (1996-1997) and graduate course Biological Applications of

Optical Microscopy (1997) > Course lecturer for graduate course Biological Applications of Optical Microscopy (1996) > Teaching assistant for graduate course Biological Applications of Optical Microscopy (1995) and medical school course The Human Nervous System (1994)

Cold Spring Harbor Laboratory
Summer Course Teaching Assistant
June 1995 - June 1995 (1 month)

Teaching Assistant for summer laboratory course Imaging Structure and Function of the Nervous System

Center for Biofilm Engineering
Research Associate
June 1991 - May 1992 (1 year)

> Maintenance and operation of microbiology laboratory > Preparation of microbial frozen stock cultures > Ensured laboratory safety > Training staff in conventional and confocal microscopy > Design and implementation of experimental protocols

Montana State University
Tutor
January 1989 - May 1991 (2 years 5 months)

Tutor for undergraduate students in subjects of organic chemistry, biochemistry and microbiology

Education

Harvard Medical School
Postdoctoral Fellow, Neurology · (1998 - 2000)

Washington University in St. Louis School of Medicine
PhD, Neuroscience · (1992 - 1997)

Montana State University-Bozeman
BS, Microbiology · (1986 - 1991)