Brian Hogan, M.S.

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linkedin.com/in/hoganbp
https://github.com/bbe2/portfolio

Sept 2018 - Dec 2020

Sept 2000 - May 2001

Sept 1997 -June 1999

Sept 1989 - May 1993

brian.p.hogan@alumni.harvard.edu

EDUCATION

Syracuse University

M.S. Applied Data Science

Boston College

M.S. Sociology, Statistics (incomplete, work relocation)
Matriculated. Multivariate and theory.

Harvard University

C.S.S., Business Administration, Harvard Extension School Eight full-term, in-person classes.

Babson College

B.S. Business Administration

Departmental Degree in Psychology, Wellesley College

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TEACHING EXPERIENCE

Adjunct Faculty

Department of Computer Science Southern New Hampshire University, Manchester, NH Instructional responsibilities include

- Perform semiweekly in-person 1.25-hour pedagogical lectures.
- Deliver curriculums with pace, agility, and activities students love.
- Perform contracted instructional design to enrich course objectives.

<u>IT 226</u> Communication in STEM Professions Southern New Hampshire University

Spring 2023

Feb 2022 -

- Instill a love for vocabulary learning and quality penned items.
- Adapt course to address paradigm shift realized with ChatGPT.
- Formulate approaches to achieve effective written analysis for business and computer science interpersonal relations.
- Relay natural language processing and text mining fundamentals in information extraction, retrieval, and corpora statistics.
- Designed a write.reflect process consisting of diverse weekly readings inventoried for words and points of view to experience ontological formation.
- Designed a word syllable <u>tree</u> cheatsheet to facilitate deepening points of view via polysyllabic articulation. This strategy performs a trick pony effect on AI algorithms and their plagiarism scoring.

<u>IT 304</u> Systems Design and Analysis Southern New Hampshire University Fall 2022

- Form a system analysis mindset across ten design methodologies.
- Perform reverse engineering of physical systems such as <u>DataMan</u>.
- Course informally acknowledged by two students as semester favorite.
- Word of mouth materialized "Gabriel" who attended for 1.5 months.

Tutor Data Science and Programming

https://tutormatchingservice.com

2019 - 2020

• <u>Tutored</u> in data science in both R and Python, including text and data mining, machine learning, and visualization (ggplot2).

Corporate Trainer

Data Science and Discrete-event Simulation Curriculum

2004 - 2014

ProModel Corporation, Orem, UT

Delivered in-person simulation training ~5 times per year to Lockheed

Martin, Merck, NASA, Pfizer, and West Point

Riding Instructor

Equestrian field sports

2002 - 2012

Gone Away Farm, Voluntown, CT (part-time)

- Trained adults and junior horse riders to perform field jumping sports and associated animal sports care.
- Raised, trained, and sold performance livestock.

INSTRUCTIONAL DESIGN AND TECHNICAL CURRICULUM DEVELOPMENT EXPERIENCE

Curriculum Developer, ICARUS AI E-Learning, Santa Monica, CA

Nov 2022 - Jan 2023

Course author: > 7.pillars.of.py

- Formulated an innovative Python learning module to address deficiencies in current literature.
- Designed for learners to experience plasticity with data transformation and grok coding of iterators, conditions, and classes.
- Target audience is new learners and programmers who struggle with datacasting and manipulation.
- Secured ICARUS-AI's inclusion of course on its E-Learning platform.
- Optimizing course for E-Learning delivery.

Instructional Designer, Southern New Hampshire University, NH

Oct 2022 - Jan 2023

Undergraduate course: <u>IT-226</u> Communication in STEM Professions

- Update curriculum with information policy research, ethics theory, sentiment exercises, and NLTK library to experience parts of speech. Undergraduate course: IT-304 Systems Design and Analysis
- Performed instructional design by building learning objectives, weekly lectures, Python training materials, and class projects.

Technical Content Writer, Learning Lab, Google Inc, (via synergis), NY, NY 03/2022 -11/2022 Course: Advanced Data Analytics Career Certificate 2023

- <u>Performed</u> the lead writing and programming a six-module Python course as part of an advanced career certificate for Grow with Google.
- Built training and staged knowledge for skilling in data objects, conditionals, functions, iterators, transformations, and classes.
- Edited scripts and ensured nomenclature and constructs across media.
- Created two course capstone projects requiring knowledge of cross course machine learning and statistical analysis methods, including simple regression, multiple linear regression, logistic regression, classification, and cross-validation.
- Drafted 21 knowledge readings, ten codebooks with >3000 lines, four course projects, three self-reviews, and tether filming code scripts.
- Trained in 18 E-Learning multimedia asset designs such as discussion prompts, peer reviews, readings, vignettes, and quizzes.

INSTRUCTIONAL DESIGN AND TECHNICAL CURRICULUM DEVELOPMENT EXPERIENCE (continued)

Technical Writer and Illustrator II, Alert Innovation, Billerica, MA Nov 2021 - Mar 2022

Department: Learning, Training, and Development

- Interviewed operation owners and engineers to draft and update documentation for quality robotics and its operating structure.
- 12 maintenance manuals, 11 service procedures, and two user manuals.

Content Writer

EXPO Summer Programs, Norwood, MA

Apr 2021 - June 2022

Department: Learning, Training, and Development

- Designed a 1-week course on AI foundations, ethics, and use cases.
- Provided 50 pages, 10,821 words, for in-person instructor training.

Curriculum Developer, ProModel Corporation, Orem, UT

2004 - 2014

Department: Consulting

Performed instructional design, technical curriculum development.

- Lockheed Martin, San Antonio, TX. Customized simulation course for scheduling plant for F-18, F-22, and F-35 Lightning engine overhaul.
- NASA, Kennedy Space Center, Titusville, FL. Customized discrete-event simulation curriculum to suit optimizing paper-to-image workflow capacity and critical diagnostic equipment requirements. Curiously, engineers completed five days of complex materials in two.
- NASA, Washington, DC. Built curriculum and logic for SaaS solution modeling diverse space asset project portfolio for quarterly forecasting of a 20-year personnel and equipment budget.
- <u>West Point</u>, West Point, NY. Curriculum development and in-person training for modeling war-based resources and logistics.

INSTRUCTIONAL READINESS

Machine Learning, Systems, and Programming

- Intro to advanced Python and R.
- Systems analysis theory and design methodology.
- Text and image mining with algorithm theory and compute libraries.
- Introduction to natural language processing with scripting.
- Introduction to database administration concepts and management.

Statistics

- Bayesian suitable to instruct with existing university materials but would require time and or assistance if needed to construct.
 - Classwork: Stanton, J. (2017). <u>Reasoning with Data</u> An Introduction to Traditional and Bayesian Statistics using R.
 - o Personal: Marin, J-M et al. (2014). Bayesian Essentials with R.
 - Topics: inference, ANOVA, association, multiple regression, categorical, time series.
- Frequentist statistical theory, classification, convolutional neural networks, decision tree, linear regression, logistical regression, multiple linear regression, principal components analysis, probabilistic, support vector machine, and unsupervised.

Industrial Engineering and Simulation Consultant

Mar 2004 - Jan 2016

ProModel Corporation, Orem, UT

In a leadership capacity, performed business process <u>reengineering</u>, including data science, application development, simulation instruction, and system implementation in the defense, manufacturing, and pharmaceutical industries. Activities included

- Strategic assessments, project management, manage developers, and write specifications.
- Data analysis, C++ coding, and designs in ERD, EER, DFD, and IDEF0.
- Demand/capacity planning, budget forecasting, and program management.
- Portfolio spanned tactical to strategic by low to high complexity.
- Security clearance.

Scientific Editor Data scien

Data science topic focus

Jul 2020 - Jun 2021

Accdon, LLC (Publishing Services), Woburn, MA

- Passed exam and completed language editing training.
- Edited three manuscripts for peer-review journal publication.

TECHNICAL and REENGINEERING PROFESSIONAL DEVELOPMENT

Google Cloud, Machine Learning Engineer Certification (in progress) October 2022 -

- Working on a total of 15 courses for professional certification.
- https://www.cloudskillsboost.google/paths/17. Account ID: b.hogan@snhu.edu.

Google Learning Lab, Multimedia Asset Design Training

Mar 2022 - July 2022

- Performed E-Learning multimedia training, including segmentation, personalization, cognitive load balancing, Flesch Kincaid measuring, contiguity, and signaling.
- Performed self-paced and team training on the design of 18 multimedia E-learning assets such as case studies, peer reviews, readings, vignettes, and quizzes.

Amazon Web Services, Account ID: FpfKzlcOwkmK4YPzjMp3JA2

2020

- Performed <u>training</u> on the platform's stack across 14 academy classes, seven live <u>twitch</u> videos, and digested experts books by <u>J. Simon</u>, and <u>C. Fregly</u>, <u>A. Barth</u>.
- Invited for a third data engineering position interview but not selected.

Scientific Language Editing, AccDon, Woburn, MA

June 2020 - Sept 2020

• Performed editing training in two language editing style guides.

Data Science Specialization Certificate, Johns Hopkins University via Coursera 2016 - 2017

• https://www.coursera.org/specializations/jhu-data-science

Edward Tufte: Analyzing and Presenting Data and Information Cognitive Style of PowerPoint

1999

Hammer and Company: Reengineering Process Mastery, www.hammerandco.com
1997 - 1999

Research Volunteer 23-bed, 63-nurse and associate acute care floor June 2021 - Jan 2022 Winchester Hospital, Winchester, MA

Manager: Debra Barbuto, RN, MSN

Investigated the efficacy of evidence-based practice purposeful hourly rounding on patient falls and length of stay satisfaction.

- Designed the data collection and encoded three months of daily patient measurement data.
- Performed REDCap API data transfer training in R software with the CRAN data.table package.
- Outcomes: associate chief nursing officer presented the methods, viability, and benefits of adopting purposeful hourly rounding. Assisted in evaluating call bell signal standardization across units to help distinguish noncritical care requests from critical requests.
- Located call bell system parts but wasn't able to upgrade the system.

RESEARCH INTERESTS

- I. Mining for insights and residue from e-data.TRASH and.or e-nonsense. Anthropology makes regular use of waste to glean insights and classifications.
 - Fascinated by the agency of e-trash, discarded e-remnants, and gibberish.
- II. Use of long-format podcasting as essential content for computer science literacy National policy pursuits are focused on requiring computer science as a highschool graduate requirement (Bass & De Jong, 2021). A complimentary argument exists for including a critical podcast analysis curriculum to facilitate computer science literacy. Consider
 - In the 1960s and 1970s, there was the challenge of the space race to fuel content for learners.
 - At present, multimedia learning modalities are expanding exponentially. Machine learning experts, such as Lex Fridman (https://lexfridman.com/), provide deep and wide content to broaden young learners' knowledge framework.
 - Every week, churns fresh, baked, and well-researched content from industry juggernauts who also provide pulse, pace, interest, and taste.
 - Is not this vine's fruit ripe for sampling?
- III. Artificial intelligences use of multisyllabicity for human conversation captivation. Similar to a magician's sleight of hand, I posit the ability of conversational AI to manipulate humans using multisyllabic words.
 - For example, in a lecture, I described a specific system, "propensity." By happenstance, a student was bewildered, maybe even dumbstruck, as it took a few minutes for them to ask for clarification.
 - Suspects and criminals have a long history of obfuscation. Analysis of their methods could help form artificial intelligence countermeasures of such persuasion tactics with "big words." Unsure but may reside under the umbrella of AI ethics and fairness.

Career Advisor

First Hand Advisors

2021 -

Office of Career Services, Harvard University

• Provide free reviews of university student's resume, curriculum vitae, and career portfolio. At present assisting zackF.

Graduate Advisor

Nursing, Programming Fundamentals, and Research Papers 2017 - 2018 Self-employed, Greater Boston Area

- Scheduled and advised graduates on their topic research, survey design, use of scales, editing, and statistics.
- Developed a student's writing and logic across nursing research papers, fact sheets, and healthcare policy assessments.

MENTORING EXPERIENCE

Name	Institution	Department	Mentoring Focus	Date	Current Position
Teddy <u>Mbuthi</u> ^	Alert Innovation	Information Technology	Portfolio, personal statement, training.	Feb 2022 - present	IT Analyst II
Selena Washington	Winchester Hospital	Inpatient Services	TEAS exam tutoring for nursing school	Oct 2022 - - present	Certified Nurse Assistant
Harrison X	Sober House		GED tutoring	May 2020 - July 2020	

^{^ &}lt;Year Up high-school workforce graduate>

AWARDS & HONORS

A. foobar participant, Google, Inc

Spring 2022

- Deep Python and Linux research yielded an <u>invitation</u> to this elusive challenge.
- B. Golden Key International Honour Society, Member

October 2020

VOLUNTEER & OUTREACH

Study Participant, ClinicalTrials.gov Identifier: NCT05058950

Oct 2022 -

An Observational Study Using Multimodal Sensors to Measure Cognitive Health in Adults and Distinguish Mild Cognitive Impairment From Normal Aging (Intuition).

• Measure cognitive performance and create a wellness score from iWatch multimodal passive sensor data. Fascinated by the agency of biometrics and biomimetics.

Wikipedia Language Editor and Article Creator

Aug 2022

Contribute by performing weekly editing and adding class based research articles.

Trash to Treasure, Winchester High School Art Department, MA

11/2020 - 09/2021

- Jackson Lumber and Millwork, Manager Geoff MacKay, Woburn, MA
- Gathered cutoffs, paint, and supersize cardboard for chair Jenn Levatino.

Mechanical Turking, amazonmturk, ID = A3IWDP1WNMWVR8

2020 - 2021

- Participated to learn the benefits of crowdsourcing research methodologies.
- Performed work on 1017 Human Intelligence Tasks and human subject activities.
- Achieved a 99.03% approval rating by working on classification, extraction validation, shape memory, and automated speech assessment exercises.

Shyna Gill

Manager, Curriculum Quality Assurance at Stride, Inc Content Writer at Google, Learning Lab https://www.linkedin.com/in/shynagill/
6235 SW Arbor Grove Drive Corvallis, OR 97333 shynagill10@gmail.com
541-908-0560

Jim McCov

Instructional Designer at Google, Learning Lab Grow with Google Career Certificates
Advisory Board at University of Houston
https://www.linkedin.com/in/ideascomealive/jimmcoy@google.com; ideascomealive@gmail.com
832.661.7145

Robert K. Stephens

Polaroid Inventor and Multiple Patent Holder 3 Ginn Road Winchester, MA <u>bob.stephens43@yahoo.com</u> 781.729.3149 781.570.9489 (cell)

Nathan Sorenson

Lead Writer at Google, Learning Lab Grow with Google Career Certificates https://www.linkedin.com/in/nathan-k-sorensen-97b4172a/ nsorenson@google.com

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Nurse Practitioner
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Professor Humayun Kahn, MS, MBA

Adjunct Faculty, Syracuse University hhkahn@syr.edu
603.890.9870

Thank you for considering Professors Kahn's reference material below.

I remain deeply grateful to each of the following people for their generosity and time in recommending me for teaching and writing positions.

- Professor Humayun Kahn, MS, MBA (DPS program recommendation)
- Professor Humayun Kahn, MS, MBA (technical writer position reference)
- Dr. Mitchell Kase, MD
- David Primrose, MS, Oracle Cloud Leader, academic peer
- And Debra Kernstock, MS, Katie Poole, MS, Professor Ralph Garcia-Reilly, and Professor John Santerre, PhD

CITATIONS

Bass, E., De Jong, D, (2020). Computer Science Courses as a Graduation Requirement at the State and National Level: A Policy Brief. International Journal of Educational Leadership Preparation, v15 n1 p126-133 Spr 2020. Retrieved from: https://eric.ed.gov/?id=EJ1254594.