ROLAND B. STARK

---

200 Great Road, Maynard, MA 01754 ☎ (978) 897-2361 ⌨ Roland@IntegrativeStatistics.com

linkedin.com/in/roland-b-stark/

ACCOMPLISHMENTS

- ♦ Advanced organizations' research efforts by systematizing data collection, analysis, and reporting.
- ♦ Introduced new statistical and behavioral-economics techniques to improve the accuracy of both predictive and causal analyses.
- ♦ Uncovered the drivers of decisions on college application, enrollment, retention, and donations.
- ♦ Created predictive models enabling hospitals to target interventions to patients most in need.
- ♦ Co-authored many peer-reviewed publications including a 2020 paper in *The American Statistician*.

RESEARCH and ANALYTIC EXPERIENCE

Statistician and Research Consultant, INTEGRATIVE STATISTICS, Waltham & Maynard, MA (2001-present)
- ♦ Assist health and higher-education institutions, nonprofits, businesses, attorneys, and academics with:
  - o Research design, from audience needs and budget constraints to power analysis, psychometrics, and techniques of behavioral economics.
  - o Data collection and data management; effective use of survey and statistical software.
  - o Resourceful data analysis; multivariate methods such as regression, binary and multinomial logistic modeling, factor and cluster analysis, and Monte Carlo simulation.
  - o Insightful interpretation and sharp, persuasive presentation of findings; expert-witness testimony.
- ♦ Clients include Princeton University, Kaiser Permanente, Women's Bar Association, and UMass Lowell.

Senior Research Analyst, DELTAQUEST FOUNDATION, Concord, MA (Jan. 2019 – Jan. 2022)
- ♦ Conducted innovative survey research on quality of life for patients and their caregivers.
  - o Investigated ways of coping with major conditions and events such as cancer, spinal surgery, hemophilia, rare diseases, and medical treatments.
  - o Improved the validity and reliability of methods for assessing patient and caregiver experience.
  - o Collaborated with physicians, pharmaceutical companies, and other researchers.
  - o Developed code in R, SPSS, Mplus, and Stata and conducted in-depth multivariate analyses.
  - o Contributed to frequent publications in peer-reviewed journals.

Senior Research Analyst, REINFORCED CARE, INC., Ashland & Raynham, MA (2012-2018)
- ♦ Analyzed and interpreted extensive patient data for hospital leadership.
  - o Identified predictors and causes of post-discharge outcomes based on complex data feeds.
  - o Investigated hospital quality improvements that would also increase revenue.
- ♦ Introduced statistical techniques: data mapping, path diagrams, random forests, Monte Carlo simulation, censored regression, CHAID, MICE, ARIMA, LASSO, and specialized R packages.
- ♦ Led marketing initiatives including white papers, collateral, presentations, and website redesign.
- ♦ Promoted to Chief Research Officer, 2016.

Senior Research Associate, **MAGUIRE ASSOCIATES, INC.**, Concord, MA (2007-2012)

♦ Conducted market research and analyzed institutional data to support colleges' enrollment, image, and alumni-outreach efforts.

   o Designed research and supervised teams in data collection, processing, analysis, and reporting.

   o Created in-depth reports addressing school image and climate, drivers of student decisions, and price sensitivity. Presented findings to presidents, deans, and faculty.

♦ Authored or contributed to company publications, proposals, and a 90-minute webinar.

♦ Clients included Fordham, Carnegie-Mellon, Bates, Georgia Tech, and University of New Mexico.

Statistician/Researcher, **HARVARD GRADUATE SCHOOL OF EDUCATION**, Cambridge, MA (2003-2007)

♦ Designed and conducted research and evaluations for online courses aimed at improving classroom teaching and supporting school reforms internationally.

   o Coordinated all aspects of large-scale internet surveys administered in three languages.

   o Introduced multivariate statistics and systematized data graphics and reporting.

   o Trained and supervised staff in statistical methods, data processing, and use of SPSS and Excel.

♦ Created innovative quality assurance approaches as part of a long-term team project.

   o Helped direct development, training, and pilot testing for assessment tools used by 45 employees.

   o Designed and conducted classroom observations and focus groups.

♦ Promoted from Research Assistant IV, 2006.

Research Associate, **INTERCULTURAL CENTER FOR RESEARCH IN EDUCATION**, Arlington, MA (2002)

♦ Developed tools for managing an accountability system encompassing 35 Boston agencies. Customized tools to streamline agencies' reporting and to build in automatic accuracy checks.

♦ Evaluated large-scale, urban public-school and early-childhood programs.

   o Constructed surveys, achievement tests, and classroom observation guidelines.

   o Combined quantitative analysis, thematic analysis, and secondary research for reports to city officials.

EDUCATION

BOSTON COLLEGE, LYNCH SCHOOL OF EDUCATION, M.Ed. in Research, Measurement, and Evaluation.

♦ GPA 4.0. Dean's Award for Academic Accomplishment. Passed comprehensive exam with distinction.

HARVARD UNIVERSITY, B.A., Medieval European History.

PROFESSIONAL ASSOCIATIONS and VOLUNTEERING

AMERICAN STATISTICAL ASSOCIATION.

AMERICAN EDUCATIONAL RESEARCH ASSOCIATION. Judged research proposals.

JOURNAL OF COLLEGE STUDENT RETENTION. Peer reviewer.

NEW ENGLAND STATISTICAL SOCIETY. Mentor.

ONE CAN HELP, a nonprofit serving at-risk youth. Advisory Board.

STRATEGIES FOR YOUTH: **CONNECTING COPS AND KIDS**. Volunteer evaluator.