

Brian J. Stankiewicz, Ph.D.

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OBJECTIVE

Obtain a technical development position at a forward-looking, growth minded company that can leverage my 20+ years of experience in research and development to create new business opportunities.

SKILLS

- Programming Languages: Python (proficient), Matlab (capable), JavaScript (capable)
- Machine Learning: Deep Learning, Neural Networks, Reinforcement Learning, Markov Modeling, Natural Language Processing
- Cloud Development: Amazon Web Services (AWS)
- Publications: 20+ Research papers, 20+ Patents
- Agile: Eight years experience using agile. Product Owner, Scrum Master trained through [Scrum Inc.](#)

EXPERIENCE

3M Corporate Research Labs, St. Paul, MN— Principal Data Scientist

Jul 2017 – Present

Drove and developed the execution and long-term vision of 3M Materials Informatics effort that is transforming how 3M develops new materials by integrating Data, Analytics and Automation into our research workflow. Identified and scoped the opportunity and presented it to senior 3M leadership.

3M Health Information Systems, St. Paul, MN— Principal Data Scientist

Jul 2012 – Jul 2017

Established the first Data Science Lab for 3M's Health Information Systems division. Developed new Natural Language Processing (NLP) applications and created an intellectual property portfolio for those opportunities. Technical lead of a cross-company opportunity between Google-Verily and 3M-HIS.

3M Corporate Research Labs, St. Paul, MN— Senior Research Scientist

Jul 2007 – Jul 2012

Established the first 3M Corporate Research Artificial Intelligence lab. Hired 20 scientists that included data scientists, machine learning experts and data engineers.

University of Texas at Austin, Austin, TX— Assistant Professor

Jun 2001 – Aug 2007

Developed a research program focused on computer vision, virtual reality, robotics, and human navigation. Developed low-vision navigation aid technology that was patented and ultimately licensed. Taught courses in cognitive science, robotics and computer science.

University of Minnesota, Minneapolis, MN— Postdoctoral Research Scientist

Jun 1997– Jun 2001

- Human and computer vision & Human and robot navigation

PROJECTS

Materials Informatics — Identified the opportunity to accelerate 3M material science research by developing a capability in Materials Informatics. Led the first proof-of-concept project to demonstrate the value in storing and connecting 3M research formulations with their characterization data.

Visual Attention Service — Product owner for the Visual Attention Service is an on-line application that simulates the neurological properties of the human visual system to predict what people will notice in a scene in the first 3-5 seconds. Scoped and led the technical development. Developed the IP strategy and contributed to the business model. My experience of building 3M's first commercial AI system taught me the value of educating senior leadership and identifying existing talent with untapped potential.

Performance Matrix — Served as a product owner for a joint 3M-Google technical team to develop a proof of concept and initial production system. Served to ensure that the teams from 3M and Google-Verily were able to move as quickly as possible by identifying potential impediments and quickly communicating to 3M senior management and/or my Google-Verily peers the issue, potential solutions and drove the process until the issue was resolved. My experience with working on a collaborative project with two large corporations in diverse markets with strong, but different cultures taught me how to effectively listen and communicate across these challenging lines.

EDUCATION

UCLA, Los Angeles, CA— Ph.D. Cognitive Science

Jun 1991– Jun 1997

Dissertation focused on human and computer vision and the role that attention plays in creating robust representations of object shape. Developed neural network models of human object recognition that generated novel predictions of human behavior and tested those predictions by running empirical studies on the human visual system.

- Advisor: John E. Hummel, Ph.D.
- Thesis: The role of attention in viewpoint-invariant object recognition.

University of California at Irvine, Irvine, California— B.A. Cognitive Psychology

Sept. 1986– Jun 1991

AWARDS

3M: Circle of Technical Excellence & Innovation: 2010, 2011, 2016, 2017

UT Austin: Ready for Commercialization Award. 2006

Patents & Papers ([Google Scholar Page](#) or [On-Line Resume Page](#))

- 20+ Patents/Patent Applications
- 20+ Research Papers