

# J. Scott Armstrong

## ANNUAL SUMMARY OF ACTIVITY - 2007

January 1, 2007 - December 31, 2007

(Prepared Feb. 25, 2008)

A copy of my resume can be found at <http://jscottarmstrong.com>

### 1. PUBLICATIONS AND RESEARCH REPORTS

(Copies are provided in full-text at <http://jscottarmstrong.com>)

#### a. Scholarly Refereed Journal Articles published in calendar year 2007

1. J. Scott Armstrong & K.C. Green (2007), "Structured Analogies in Forecasting," *International Journal of Forecasting*, 23 (2007) 365-376
2. K.C. Green, J. Scott Armstrong & Andreas Graefe (2007), "Methods to Elicit Forecasts from Groups: Delphi and Prediction Markets Compared," *Foresight*, 8, 17-20
3. J. Scott Armstrong (2007), "Forecasting of Software Development Work Effort: Introduction," *International Journal of Forecasting*, July-September 2007, Volume 23, Issue 3, p. 447
4. Kesten C. Green & J. Scott Armstrong (2007), "Global Warming: Forecasts by Scientists versus Scientific Forecasts," *Energy and Environment*, 18, No. 7+8, 995-1019. see related video.
5. J. Scott Armstrong (2007), "Significance Tests Harm Progress in Forecasting," *International Journal of Forecasting*, 23 (2007), 321-327
6. J. Scott Armstrong (2007), "Statistical Significance Tests are Unnecessary Even When Properly Done", *International Journal of Forecasting*, 23 (2007), 335-336.
7. J. Scott Armstrong & Kesten C. Green (2007), "Value of Expertise for Forecasting Decisions in Conflicts," *Interfaces*, 37 (3), 287-299
8. H. Evanschitzky, C. Baumgarth, R. Hubbard & J. Scott Armstrong (2007), "Replication Research's Disturbing Trend," *Journal of Business Research*, 60 (2007), 411-415
9. Ray Hubbard & J. Scott Armstrong (2007), "Why We Don't Really Know What 'Statistical Significance' Means: A Major Educational Failure," *Journal of Marketing Education*, 28 August (2006), 114-120
10. J. Scott Armstrong & Kesten C. Green (2007), "Competitor-oriented Objectives: The Myth of Market Share," *International Journal of Business*, 12 (2007), 117-136

**b. Books published in calendar year 2007**

None. My *Persuasive Advertising* book is still in process.

**c. Other Articles and Proceedings published in calendar year 2007**

J. Scott Armstrong & Adrian E. Tschoegl (2007), "Review of *Expert Political Judgment* by P.E. Tetlock : How good is it? How can we know?, Princeton University Press (2006)," *International Journal of Forecasting*, 23, 339-342.

Randall J. Jones Jr., J. Scott Armstrong & A.G. Cuzan (2007), "Forecasting Elections Using Expert Surveys: An Application to U.S. Presidential Elections," *Presented at the American Political Science Association Proceedings*, Chicago, August 20.

**d. Manuscripts Under Review as of December 2007**

"Verification of Citations: Faculty Towers of Knowledge," (with M. Wright) *Interfaces* Forthcoming with commentary.

"Citation house rules: Reply to commentators," (with M. Wright), *Interfaces* (2007), forthcoming.

**e. New Working Papers during calendar year 2007 (not listed above)**

J. Scott Armstrong, Kesten C. Green & Willie Soon, "Polar Bear Population Forecasts: A Public-Policy Forecasting Audit."

J. Scott Armstrong, Kesten C. Green Randall J. Jones & Malcolm Wright, "Predicting Elections from Politicians' Faces."

**2. ACADEMIC ACTIVITIES**

**a. Reviewing and Editing during 2007**

I organized and edited a section on "Forecasting Software Effort" (with my one-page introduction) for the *International Journal of Forecasting*, July-September 2007, Volume 23, Issue 3, p. 447.

*Interfaces*

*International Journal of Forecasting*

*Journal of Marketing Science*

*Marketing Science*

*Service Industries Journal*

**b. Academic Presentations made in calendar year 2007**

“Methods for Predicting Decisions in Conflict Situations,” at the Global Futures Forum: How to Understand And Anticipate Emerging Threats, Zurich, January 20.

Presented talks related to my work on *Persuasive Advertising* and on “Terrorism Forecasting.” University of South Australia in Adelaide in February.

Presented lecture on *Persuasive Advertising* at Sydney University, February 16

“Auditing Public Policy Forecasting: Climate Change, Gun Control, and Other Issues,” Featured Talk at the International Symposium on Forecasting, June 27.

“Forecasting the 2008 Presidential Election Using Delphi Surveys,” at the American Political Science Association meeting in Chicago, Aug. 30

**c. Service to the Department, School, and Academic Community (including undergraduate, MBA, or PhD course development, external grants pursued or obtained, coverage in the mass media, doctoral dissertation committees etc.) in 2007.**

“Presidential Face-off,” *Science*, vol. 318, November 2, 2007, p. 723,

Presented a Congressional Briefing in their “Climate Seminar Series” on September 13, 2007 based on the Green & Armstrong paper, “Global warming: Forecasts by Scientists or Scientific Forecasts.” (See on You-tube)

Proposed the “Global Warming Challenge” to Al Gore in June 2007. This led to some media coverage (e.g., Fox News, local and national) along with extensive Internet coverage. Mr. Gore is still considering this. The history of this challenge is being tracked at the [theclimatbet.com](http://theclimatbet.com) (developed in collaboration with Kelly Jin). Since June 16, 2007, there have been over 25,000 visits.

Created a new web site, [publicpolicyforecasting.com](http://publicpolicyforecasting.com)

Visiting professor at the University of South Australia in Adelaide in February.

*Application of my research to consulting:* I have had the happy experience of being able to apply my research findings in my consulting. These included:

Long-run Health Spending Projection Advisory Board for the 75-year forecast that the Centers for Medicare and Medicaid Services must provide to the U.S. Congress as part of their annual Medicare trustees Report to Congress.

Forecasting methods for Weapons of Mass Destruction threats facing the U.S (for the Defense Threat Reduction Agency.)

Terrorism forecasting methods, as a National Intelligence Council Associate.

Methods for forecasting polar bear populations, for the State of Alaska.

A commercial free speech case involving to the effects of a Florida statutory disclaimer on consumers and providers of implant dentistry. This case might be returned to the U.S. Supreme Court.

#### *Evidence-based management initiatives*

**Forecasting Principles Web Site** (<http://forecastingprinciples.com>).

I, along with Kesten Green, maintain the forecasting principles site, which summarizes all useful knowledge in forecasting. There were 324,000 visits, up 230% from 140,000 the previous year. It had over 2.5 million hits. The site is listed #1 of 24 million sites generated under the Google search query “forecasting.”

**Forecasting Audit:** We made extensive improvements to the Forecasting Audit software.

### **3. RESEARCH CONTENT AND FINDINGS**

#### **Research effort**

As in the previous five years, most of my efforts were been devoted to my forthcoming book, *Persuasive Advertising* (Palgrave-Macmillan, 2009?). This will continue to be my major activity this coming year. Drafts are available upon request.

#### **Findings**

1. I have been involved with a project to conduct a forecasting audit of the decision to classify polar bears as threatened or endangered. Forecasts from the U.S. Fish and Wildlife Services claim that global warming will reverse the upward trend in the polar bear population and lead to a sharp drop in the polar bear population. We show that they have contravened most principles of scientific forecasting. In fact, they properly applied on 12% of the principles. For such an important decision, one should expect full compliance of the proper procedures.
2. Demonstrated that there are no scientific forecasts to support global warming.

#### **Impact**

*Citations in journals:* With self-citations excluded, the *Social Science Citation Index*

(including 8 from the SCI) reported 288 first-authored paper citations versus 240 for last year's report (this is preliminary and the final count will be a bit higher).

*Citations in books:* A search on Amazon on January 1 for "j scott armstrong" yielded 69 references to my research (self-references excluded) versus 52 in 2006, an increase of 33%.

*h-score:* For those papers on which I have been first author, my h-score was 26 (Google Scholar).

*Marketing Department First in Ranking of Scholarly Research:* The January 12, 2007 issue of *The Chronicle of Higher Education* contained an article by Peter Fogg describing the new "Faculty Scholarly Productivity Index." It includes such measures as numbers of books and journal articles published, awards, and citations in journals and books. In their most recent rankings, two departments at the U. of Pennsylvania ranked #1 in the U.S.: Biomedical Engineering, and Marketing. I believe my contributions played an important role in our ranking.

### **Web Site Cites**

A Google analysis using "j scott armstrong" (with key words to omit cites not related to my research) and "research" turned up 500 unique sites, an increase of 18% over last year.

A Google Scholar search for "j scott Armstrong" yielded 729 sites an increase 43% over last year.

My research was ranked first in 30 research areas in Google searches. (See Exhibit 1 on the last page of this report).

### **Downloads of Journal Articles**

In 2005, there were 3,740 downloads of my papers from RePEc. This is in the top one percent of the researchers listed on RePEc. My download rate is currently about 7,000 per year at Scholarly Commons. I expect that many downloads are made from my homepage but I have a way to assess this, and in addition, my papers were periodically removed from the site. In addition, downloads are made from Cogprints.org, SSRN, and other sources.

As of February 2008, three of my papers were on the top 25 most frequently downloaded papers for the *International Journal of Forecasting* for the latest period (July-Sept 2007).

### **Other**

My latest paper on replication attracted much attention on the ELMAR and the JDM listserves.

My ranking on Manyworlds (research summaries written for practitioners) is currently #5 and it was #1 at some points during the year.

Included on collegedegree.com listing entitled, "55 of the Hottest, Smartest, Most Talked About College Professors," in July 2007.

#### **4. TEACHING**

**Information describing courses taught and teaching ratings will be compiled and attached to this document by Angela Di Santo. If you would like to add any observations regarding your teaching during 2007 please add them here. These might include pedagogical innovations, substantial new content, or awards or other recognition.**

As per my agreement with the Chair, Bob Meyer, I have begun a major conversion in my teaching style. This has required preparation of PowerPoint Slides for all my lectures, development of lectures, the creation of in-class exercises, and the preparation of examination materials. The changes have led to a much higher retention of students. I continue working on the changes.

## Exhibit 1

### Top-Ranked Web Sites by categories (alphabetical order) (February 16, 2008)

This exhibit lists 29 categories where my research was ranked first in a Google Search.

<u>Ranked first</u>	<u>Total Sites</u>
<i>Forecasting</i>	
“asymmetric errors” & forecasting	95
“causal forces”	23,900
“combining forecasts”	9,700
expert systems & forecasting	226,000
extrapolation & forecasting	107,000
forecasting	17,600,000
“forecasting dictionary”	1,600
“index method” & forecasting	15,900
“judgmental decomposition”	170
“judgmental bootstrapping”	716
“long-range forecasting”	80,600
“polar bear” & forecasting	32,500
public policy forecasting	1,300,000
“Relative Absolute Error” & forecasting	707
“role-playing” & forecasting	128,000
rule-based & forecasting	133,000
“structured analogies”	506
<i>Corporate Governance</i>	
“social irresponsibility” & management	4,870
<i>Marketing</i>	
advertising & principles	1,340,000
“intentions to purchase”	25,100
marketing replications	222,000
“monetary incentives” & surveys	42,100
“return postage” & surveys	27,800
<i>Planning &amp; Strategy</i>	
Competitor-oriented objectives	800
“consumer behavior” & prediction	56,000
“error measures” forecasting	3,660
“escalation bias”	845
“formal planning” & evaluation	26,200
<i>Education</i>	
“business school” & prestige	191,000
learner responsibility	345,000