### UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC

Petitioner

v.

### VALTRUS INNOVATIONS LIMITED

(record) Patent Owner

Patent No. 6,728,704

# **DECLARATION OF PADHRAIC SMYTH**

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### I. ENGAGEMENT AND COMPENSATION

1. My name is Padhraic Smyth. I have been retained by Google LLC for the purpose of providing my opinion with respect to the unpatentability of U.S. Pat. No. 6,728,704 ("the '704 patent"). I am being compensated for my time in preparing this declaration at my standard hourly rate, and my compensation is not dependent upon my opinions or the outcome of the proceedings. My curriculum vitae is attached as Ex. 1003.

### II. QUALIFICATIONS

2. I am currently a Professor in the Department of Computer Science at the University of California, Irvine. I have held the title of Chancellor's Professor since 2018. Before that, I held the title of Full Professor from July 2003 to 2018. From July 1998 to June 2003, I held the title of Associate Professor. I began at UC Irvine as an Assistant Professor, a title I held from April 1996 to June 1998. I also hold joint faculty appointments with the Departments of Statistics and Education at UC Irvine.

3. I was a Founding Director of the UCI Data Science Initiative at University of California, Irvine, from July 2014 to June 2018. I was also a Founding Director of the Center for Machine Learning and Intelligent Systems at the University of California, Irvine from January 2007 to July 2014.

4. From October 1988 to March 1996, I was a Member of Technical Staff

and a Technical Group Leader (from 1992) at the Jet Propulsion Laboratory, California Institute of Technology, Pasadena, California.

5. I completed a Bachelor's Degree in Electronic Engineering in 1984 at the National University of Ireland, University College Galway. I completed a Master's Degree in Electrical Engineering at the California Institute of Technology, Department of Electrical Engineering, in 1985. In 1988, I completed a Ph.D. in Electrical Engineering from the California Institute of Technology.

6. I have spent three and a half decades researching topics relevant to the '704 patent, including data mining, machine learning, artificial intelligence, pattern recognition, and applied statistics. I am a co-author on over 200 published papers in these and related fields.

7. I have co-authored or edited the following books that are relevant to the subject matter of the '704 patent: *Modeling the Internet and the Web: Probabilistic Methods and Algorithms*, P. Baldi, P. Frasconi, and P. Smyth, John Wiley, June 2003; *Principles of Data Mining*, D. Hand, H. Mannila, and P. Smyth, Cambridge, MA: MIT Press, 2001; and *Advances in Knowledge Discovery and Data Mining*, U. Fayyad, G. Piatetsky-Shapiro, P. Smyth, and R. Uthurasamy (eds.), Palo Alto, CA: AAAI/MIT Press, 1996. I was an editor of the following conference proceedings relevant to the '704 patent: C. Apte, J. Ghosh, P. Smyth (eds.), *Proceedings of the 17th ACM SIGKDD International Conference on Knowledge Discovery and Data* 

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