

## Prof. Ian P. Gent Resume (summary)

<b>Job Title:</b>	Professor (Full Professor)	<b>Address:</b>	School of Computer Science
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<b>Degrees:</b>	<b>PhD</b> Computer Science	Warwick	1988-1993
	<b>MSc</b> Artificial Intelligence	Edinburgh	1986-1987
	<b>BA</b> Mathematics	Cambridge	1983-1986
<b>Career:</b>	University of St Andrews	Lecturer/Reader/Prof	1999 – present
	University of Strathclyde	Lecturer	1995–1999
	University of Edinburgh	Researcher/Lecturer	1992-1994

**Research Summary:** The bulk of my research work has been in Constraint Programming. This is the study of constructing solutions to problems where a set of variables have to be given certain values subject to a set of constraints. It has applications to a wide range of commercially important problems, such as airline crew rostering, timetabling, scheduling, and resource optimisation. My key research subareas have been as follows, each of course being a major research effort over several years: Engineering Constraint Solvers; Symmetry in Constraint Programming; Quantified Constraints; Satisfiability; and Phase Transitions in Artificial Intelligence.

One thread throughout my career has been interdisciplinary research, especially with Physics and Mathematics. A second thread has been the construction of research software to embody our research contributions. One of these, Minion, has had a number of real-world applications as diverse as being part of a commercial nanoproteomic analysis system, constructing crossword puzzles on demand online, and allocating chalets at a holiday resort.

In 2013 I wrote “The Recomputation Manifesto” on reproducibility in computer experiments, and co-founded <http://recomputation.org>. This reflects an interest in quality of empirical science over more than 20 years.

**Career Publication and Citation Summary.** I have published about 80 papers in high quality journals and conferences in Computer Science <https://tinyurl.com/dblpgent>. These include multiple publications in the top venues in my field. For example I have published seven papers in the journal *Artificial Intelligence* which is the leading journal in that discipline. Throughout my career my papers have had significant impact on the field as measured my citation counts. My *h*-index from Google Scholar is currently 40, and 15 of my papers have been cited 100 times or more (see <http://tinyurl.com/scholargent>).

**Career Funding Summary.** I have obtained more than £4M in external research funding in my career. The bulk of this has been from EPSRC (see <http://tinyurl.com/grantsgent>). I have held 15 research grants from EPSRC, 6 of them as Principal Investigator. Recently, I have obtained a \$40,000 in-kind contribution from Microsoft to support work on recomputation related to this proposal (see <http://tinyurl.com/azuregrants>).

**Other activities:** I co-founded the community blog Depressed Academics, and named and popularised the Petrie Multiplier, which now has its own Wikipedia page.

18 September 2015.

A full CV is of course available on request.