Issue 134: Joy of Reading

This month’s thought centers around a low-tech, always available (at least when there is light), compact and delightful way of entertaining and informing: reading. It seems that as more and more people spend more and more hours online the simple pleasure of reading an actual, made-of-paper book is confined to relatively small percentage of the population. And that is truly sad because perhaps the most charming aspect of reading is when we share a book in common. Recently, the Blog Wyrm staff have been reading and sharing together the wonderful literary work of *The Lord of the Rings*. All of us have consumed it in one way or another for decades but this is the first time we’ve sat down and read it out loud together as a group and the joy of this activity keeps increasing. Perhaps more people will come around.

Now onto the columns.

While having a reputation for being able to perform some amazing feats of classification, neural nets also have a reputation as being ‘black boxes’. This label is hung on the neural net as a way of either saying that the math and method behind this common family of algorithms is too hard and dense for most or as a way of avoiding having to deal with or both. This month’s [Aristotle2Digital](http://aristotle2digital.blogwyrm.com/?p=1550) demonstrates that with a little, everyday calculus – in the form of the chain rule – and some bookkeeping, the math of the neural net is readily understood.

Bad incentives led to bad outcomes. This common maxim of economic wisdom is (or should be) the cornerstone of every policy decision that is made. Sadly, that is rarely the case, as has been explored in numerous examples here in this column. This month’s [CommonCents](http://commoncents.blogwyrm.com/?p=1040) takes a macroscopic view of these various lessons and comparison contrasts the two major ways in which this maxim can come into effect: adverse selection and moral hazard.

The concept of the mean free path helps to organize the observations and effects seen in many physical systems, particularly gases and plasmas, but, as there are many effects in interplay it is hard to get a feel for the numbers. This month’s [UndertheHood](http://underthehood.blogwyrm.com/?p=1922) examines some models of the Earth’s atmosphere in order to get a feel of just how big the mean free path is at various altitudes and how a related parameter, the collision time, is defined.

Enjoy!