



AI Profiles: An Interview with Peter Stone

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DOI: [10.1145/3098888.3098891](https://doi.org/10.1145/3098888.3098891)

Abstract

This column is the third in our series profiling senior AI researchers. This month we interview Peter Stone.

Introduction

Our third profile for the interview series is Peter Stone, who is a Professor at the University of Texas at Austin and the COO and co-founder of Cogitai, Inc.



Figure 1: Peter Stone

Biography

Dr. Peter Stone is the David Bruton, Jr. Centennial Professor and Associate Chair of Computer Science, as well as Chair of the Robotics Portfolio Program, at the University of Texas at Austin. In 2013 he was awarded the University of Texas System Regents' Outstanding Teaching Award and in 2014 he was inducted into the UT Austin Academy of Distinguished Teachers, earning him the title of University Distinguished Teaching Professor. Professor Stone's research interests in Artificial Intelligence include machine learning (especially reinforcement learning), multiagent systems, robotics, and e-commerce. Professor Stone received his Ph.D in Computer Science in 1998 from Carnegie Mellon University. From 1999 to 2002 he was a Senior Technical Staff Member in the Artificial Intelligence Principles Research Department at AT&T Labs - Research. He is an Alfred P. Sloan Research Fellow, Guggenheim Fellow, AAAI Fellow, Fulbright Scholar, and 2004 ONR Young Investigator. In 2003, he won an NSF CAREER award for his proposed long term research on learning agents in dynamic, collaborative, and adversarial multiagent environments, in 2007 he received the prestigious IJCAI Computers and Thought Award, given biannually to the top AI researcher under the age of 35, and in 2016 he was awarded the ACM/SIGAI Autonomous Agents Research Award.

Getting to Know Peter Stone

How did you become interested in AI?

The first I remember becoming interested in AI was on a field trip to the University of Buffalo when I was in middle school or early high school (I don't remember which). The students rotated through a number of science labs and one of the ones I ended up in was a computer science "lab." The thing that stands out in my mind is the professor showing us pictures of various shapes such as triangles and

squares, pointing out how easy it was for us to distinguish them, but then asserting that nobody knew how to write a computer program to do so (to date myself, this must have been the mid '80s). I had already started programming computers, but this got me interested in the concept of modeling intelligence with computers.

What made you decide the time was right for an AI startup?

Reinforcement learning has been a relatively "niche" area of AI since I became interested in it my first year of graduate school. But with recent advances, I became convinced that now was the time to move to the next level and work on problems that are only possible to attack in a commercial setting.

How did I become convinced? For that, I owe the credit to Mark Ring, one of my co-founders at Cogitai. He and I met at the first NIPS conference I attended back in the mid '90s. We've stayed in touch intermittently. But then in the fall of 2014 he visited Austin and got in touch. He pitched the idea to me of starting a company based on continual learning, and it just made sense.

What professional achievement are you most proud of?

I'm made proud over and over again by the achievements of my students and postdocs. I've been very fortunate to work with a phenomenal group of individuals, both technically and personally. Nothing makes me happier than seeing each succeed in his or her own way, and to think that I played some small role in it.

What do you wish you had known as a Ph.D. student or early researcher?

It's cliché, but it's true. There's no better time of life than when you're a Ph.D. student. You have the freedom to pursue one idea that you're passionate about to the greatest possible, with very few other responsibilities. You don't have the status, appreciation, or salary that you deserve and that you'll eventually inevitably get. And yes, there are pressures. But your job is to learn and to change the

world in some small way. I didn't appreciate it when I was a student even though my advisor (Manuela Veloso) told me. And I don't expect my students to believe me when I tell them now. But over time I hope they come to appreciate it as I have. I loved my time as a Ph.D. student. But if I had known how many aspects of that time of life would be fleeting, I may have appreciated it even more.

What would you have chosen as your career if you hadn't gone into AI?

I have no idea. When I graduated from the University of Chicago as an undergrad, I applied to four CS Ph.D. programs, the Peace Corps, and Teach for America. CMU was the only Ph.D. program that admitted me. So I probably would have done the Peace Corps or Teach for America. Who knows where that would have led me?

What is a typical day like for you?

I live a very full life. Every day I spend as much time with my family as they'll let me (teenagers....) and get some sort of exercise (usually either soccer, swimming, running, or biking). I also play my violin about 3–4 times per week. I schedule those things, and other aspects of my social life, and then work in all my "free" time. That usually means catching up on email in the morning, attending meetings with students and colleagues either in person or by skype, reading articles, and editing students' papers. And I work late at night and on weekends when there's no "fun" scheduled. But really, there's no "typical" day. Some days I'm consumed with reading; others with proposal writing; others with negotiations with prospective employees; others with university politics; others with event organization; others with coming up with new ideas to burning problems.

I do a lot of multitasking, and I'm no better at it than anyone else. But I'm never bored.

How do you balance being involved in so many different aspects of the AI community?

I don't know. I have many interests and I can't help but pursue them all. And I multitask.

What is your favorite CS or AI-related movie or book and why?

Rather than a book, I'll choose an author. As a teenager, I read Isaac Asimov's books voraciously – both his fiction (of course "I, Robot" made an impression, but the Foundation series was always my favorite), and his non-fiction. He influenced my thoughts and imagination greatly.



Help us determine who should be in the AI Matters spotlight!

If you have suggestions for who we should profile next, please feel free to contact us via email at aimatters@sigai.acm.org.
