

## Come fly with me!

By Marcel Voia and friends, 8 March 2024

The premature passing of Anand Acharya leaves us with great sadness. Our deepest condolences go to his wife, Kusum, daughters Jasmin and Nina, and other family members.

The Frank Sinatra song inspires this memorial and a celebration of Anand's life. One major impact he had on Marcel was to provide assurance that flying was quite safe. All commercial airline pilots undergo substantial training, and airlines have rigorous safety checks. We never flew with Anand (or at least knew that we did). Anand's reassuring words eased the anxiety of each flight. We summarize our interactions with Anand as our student, colleague, friend, and teacher.

**Student:** Anand's presence at Carleton University was a random variable. Marcel noticed that Anand would not attend his econometric classes for long stretches. The assignments and exams were top-notch. Marcel learned that Anand was an accomplished pilot, having served as a Captain in the Royal Canadian Air Force and as an Air Canada pilot. There was an ongoing theme of the importance of accounting for unobserved heterogeneity.

Despite his excellent career at Air Canada, Anand decided to pursue a Ph.D. at Carleton. Anand was learning for personal fulfillment and growth. Marcel encouraged Anand to take part in the broader research community in Ottawa, particularly connecting with researchers who were working with duration models. One such person was Marcel's friend and colleague, Kim P. Huynh from the Bank of Canada. Kim played a role in introducing Anand to researchers within the Bank and from outside. This network included his external reviewer, the distinguished Professor Pravin Trivedi, a world-renowned econometrician and health economist.

Anand obtained his Ph.D. in 2016. The title of the dissertation was "Robust Instrumental Variables and Accelerated Life Regressions." Anand's dissertation, endorsed by Pravin, earned a Carleton University Senate Medal!

**Colleague:** After completing his Ph.D., Anand started the transition from full-time flying to a research-oriented career. Anand divided his time between family commitments, flying, and addressing statistical questions related to healthcare utilization. Unfortunately, when the Covid-19 pandemic arrived in 2020, it altered Anand's plans. Anand spent extensive hours flying essential supplies from various locales in Asia.

During this busy and uncertain time, Anand continued to work on publishing his thesis. Anand would work during breaks between flights. The revised paper, "Robust Duration Inference and Bias in Allocating Critical Hospital Resources," is under peer review at an academic journal.

**Friend:** During and after his Ph.D. studies, we would meet as his schedule permitted. Kim and Marcel utilized conferences, seminars, and workshops to discuss research. We delved into

deeper conversations with specialists from around the world. In these settings, Anand didn't speak as a student seeking answers. Anand engaged as a seasoned researcher with a profound understanding of the problem, discussing relevant questions from different angles.

These academic discussions also doubled as friendly conversations, often centered around the book "A History of the World in 6 Glasses" by Standage (2005). We sampled from the six glasses: beer, wine, spirits, coffee, tea, and cola. Even more delightful were the surprise beverages that Anand brought back from his various trips.

**Teacher:** Anand became an expert on survival/duration analysis as it was the focus of his thesis. He delved deep into the literature and sought out experts beyond us. On a layover in London, he went to Oxford to meet with Sir David Cox, the originator of the Cox Proportional Hazard Model (see Cox, 1972). In another interaction, he engaged with his external examiner Pravin Trivedi. Through these discussions, Anand became our teacher on the intricacies of survival analysis. When Sir David Cox passed in January 2022, we had a three-hour Zoom session to discuss the various research and history of survival models. We learned quite a bit from Anand.

Anand had coded up his survival model in Stata and shared his code with us. It was his goal to make this code available to all via a Stata Journal publication. Anand said it would be cool to have a command entitled "aaaft" or the "Anand Acharya Accelerated Failure Time." Sadly, this project would not be completed, and now it is left to us to learn from it without his guidance.

### **References:**

Anand Acharya (2016): "Robust Instrumental Variables and Accelerated Life Regressions" Carleton University PhD thesis: <https://doi.org/10.22215/etd/2016-11618>

Anand Acharya, Lynda Khalaf, Kusum Menon, Marcel Voia, Myra Yazbeck, and David Wensley (2023): "Robust Duration Inference and Bias in Allocating Critical Hospital Resources" mimeo.

David R. Cox (1972): "Regression models and life tables (with discussion)." Journal of the Royal Statistical Society, Series B, 34:187–220.

Tom Standage (2005): "A History of the World in 6 Glasses" Walker & Company.



Date and venue: 4 December 2023 at the National Arts Centre in Ottawa, ON.  
(left to right) Kim P. Huynh, Robert J. Petrunia, Marcel Voia, Anand Acharya, and Abeer Reza.  
Photographer – a generous passerby on Kim P. Huynh's iPhone.