

Jeremy Epstein

(1980 BS Computer Science)

From Bell Labs, the National Science Foundation (NSF), and now the White House, Jeremy Epstein, computer science alum from the class of 1980, has had an incredible career and it all started at New Mexico Tech!

Well, there was one step before NMT...

It was 1973 and Jeremy, then 15 years old, was faced with a fork in the road - what should his first elective in high school be? Computer programming, a new class no one really knew anything about or jewelry making, a hobby he had grown to love during summer camp? With some convincing from his mom, computer programming won out. It has been over 50 years since that class with Mr. Peralta at Sandia High School and Jeremy has never turned back!



With Jeremy's passion for CS ignited, it was serendipitous that Jeremy's dad should meet and strike up a conversation with none other than Dr. Tom Nartker, NMT's Chair of Computer Science, while at an out-of-state conference. At Nartker's invitation, Jeremy visited campus. When it came time to apply for colleges, NMT was on his list and eventually won out because of its affordability.

While at Tech, Jeremy was in the honors program, worked at the infamous computer center, and as an undergraduate, also conducted research and wrote programs for the computer science department. In addition to his hands-on experience at NMT, Jeremy was able to secure internships each summer with Los Alamos National Laboratory, Burroughs Corp, and Hewlett Packard.

In 1980, as a newly minted NMT graduate, Jeremy headed off to New Jersey to work for Bell Labs - a job Jeremy still adds to his resume! At the time, Bell Labs was the most prestigious and exciting place among scientists to work. Shortly after getting hired, Bell sent Jeremy off to Purdue to get his masters, which he earned in 1981. While at Bell, Jeremy worked on designing one of the very first relational database management systems, ahead of even Oracle.

After a few years with Bell and a short stint working on Unix, in 1988 Jeremy transitioned into cybersecurity, where he has worked ever since.

The '80s were very early days in the cybersecurity world. Not many people had computers, the internet barely existed and many computers were not connected. Jeremy was on the forefront of defining what cybersecurity was - having to ask questions like, "We know this can be hacked, but why would someone want to do that?" Jeremy was a part of the teams that built the first secure operating systems, graphical user interfaces, and network operating systems.

A good portion of Jeremy's career was spent as a consultant in elections security where he advised government officials on how to use computers safely in elections and often advised them not to use them at all.

Jeremy's work with SRI International, an independent nonprofit research institute, resulted in the design of more secure elections systems. He has served on multiple commissions examining secure elections and has held numerous roles at the state level explaining the technology and the risks. Upon his council, states like Virginia have chosen to eliminate the use of computers in elections all together.

His over 20 years of experience in elections security led to him being selected as an Embassy Fellow for the US Embassy Science Fellows Program. Jeremy just returned from spending 3 months in Indonesia educating government officials on security ahead of their 2024 general elections.

Jeremy's work with the SRI and the US Embassy has coincided with his official role at the NSF and what he names as his greatest career accomplishment.

"I've really enjoyed working at the NSF, it has been a fascinating experience. Through my role I've shaped American cybersecurity research. The program I lead is literally the biggest unclassified research program for cyber security in the world. We have been able, through effective use of government spending, to move the nation forward in cybersecurity protections."

Jeremy joined the NSF in 2012 as a Program Officer, advancing to Deputy Division Director and then to his current role as Lead Program Officer where he is responsible for leading the Secure and Trustworthy Cyberspace program (SaTC). SaTC is one of the NSF's largest research programs, consisting of over 1000 active grants and over \$75M in funding including supporting research that studies the intersection of technology and social sciences, such as security and privacy needs of marginalized populations.

Along with his work at the NSF, Jeremy also finds joy and pride in giving back.

Disheartened by seeing the number of women entering cybersecurity decline since he graduated in the 80s, Jeremy organized and led a scholarship program specifically geared towards getting more women into cybersecurity. He raised almost \$1M and helped support 125 women earn degrees.

“It is just so exciting to know that I was able to help them and make a difference in the future of the field.”

Jeremy started his new role as Assistant Director for Technologies and Privacy at the White House’s Office of Science and Technology Policy the week following this interview. In this new role, Jeremy will be a counsel on issues related to the intersection of AI and cybersecurity and while he is in the early days of his new role, is excited to serve the country in this way.

“I am excited to help make technology work for Americans and not against Americans. It is exciting to be involved during a hot time for these topic areas [AI and cybersecurity].”

When he is not working, Jeremy enjoys spending time with his three children and grandchild - all of which he is very proud of. He also enjoys bike riding and hiking. He is also known for baking and makes excellent baked bribes for meetings. His most famous recipe? Chocolate cupcakes!

Jeremy has certainly made his mark on the cybersecurity world! We are thankful that computers stole his attention all those years ago and for the warm NMT welcome from Dr. Nartker. When asked what he would tell NMT alumni that have just graduated, he says,

“Keep your eyes open and never stop looking forward because you can go places you never would have thought of going. If you would have told me when I was 21 and a new Tech graduate ‘someday you will work in the White House’, I wouldn’t have believed it. Very few people have their sights set that high but you can do it and a Tech education can really make a difference in giving you that opportunity.”