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Script: *SEI Podcast Series Interview – The Quantum Advantage*

SME(s): *Catherine Bernaciak, Daniel Justice, and Jason Larkin*

Interviewer: *Suzanne Miller*

Interview Conducted: *Remote Podcast*

Suzanne Miller: My name is Suzanne Miller. I am a principal researcher here at the SEI. Today I would like to welcome my colleagues Catherine Bernaciak, Dr. Jason Larkin, and Daniel Justice. Jason and Justice are researchers in the SEI's Emerging Technology Center. Catherine is a machine learning research scientist in the SEI's CERT Division.

Today, we are here to talk quantum computing, specifically Quantum Advantage and why this is important to the SEI and the federal government. Welcome.

Catherine/Jason/Daniel: Respond.

- 1. Suzanne:** Let's start off by you tell us a little bit about yourselves and the work that you do here at the SEI. How did you get into Quantum Computing?

- 2. Suzanne:** Today we are here to talk about your work in quantum computing, which is a priority right now for the DoD and the federal government. Specifically, we are going to talk about the *Quantum Advantage*. To begin, what exactly are we talking about when we use this term?

- 3. Suzanne:** Let's talk about why *Quantum Advantage* is important to the SEI and in our work with federal agencies?
<Jason/Justice/Catherine, talk about SEI Quantum work here>

- 4. Suzanne:** What is hard about quantum computing? Our audience members are always interested in the challenges that our researchers encounter.

5. Suzanne: One thing we emphasize in our podcasts is transition. What resources are out there right now and how can our audience access them?

Suzanne: Thanks so much for joining us today. In addition to their other published works, which we will link to, Jason and Daniel also authored an SEI Blog post on their work in quantum computing. To find the blog post, go to insights.sei.cmu.edu and search under “Larkin” in the Author’s name field.

Jonathan/Jason, thanks for being here and sharing your experiences. **[Turns to Camera]** And to our listeners, thanks for joining us today. We will include links in our transcript to all resources mentioned in this podcast.

