

Vignette 4 – DDS: Fighting the Hiring Process Instead of Our Adversaries

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In novelist James Patterson and former President Bill Clinton's political thriller, *The President Is Missing*, a terrorist group threatens to unleash cyber-warfare on the Western World, bringing about the "Dark Ages." The President (in the story) must sneak away from the White House incognito, engage in shootouts, survive an ambush on Memorial Bridge, and assemble the best computer scientists from our government and military to take out the impending computer virus before it strikes.

At this point, the novel introduces a top "white hat hacker" who joins the President's team. She impresses the FBI with her hacking abilities and the Bureau hires her on the spot. In a sensational thriller that constantly demands suspended disbelief, this was by far the most unbelievable.

There's no way government hiring works that effectively or efficiently.

We know because we tried.

The Defense Digital Service (DDS) is an organization within the Pentagon tasked with driving a giant leap forward in the way DoD builds and deploys technology and digital services. One of DDS's most visible programs is Hack the Pentagon, the first bug bounty program in the history of the federal government. Bug bounties (also known as crowd-sourced hacking challenges) allow private citizens to harness their diverse range of talents to contribute and strengthen our nation's security posture in exchange for a monetary reward for finding security issues. Bug bounties are an integral part of private-sector security strategies at companies including Microsoft, Google, Twitter, and Facebook.

The winner of one of these Hack the Pentagon challenges was a 17-year-old high school student, who beat out 600 other invited hackers by reporting 30 unique vulnerabilities to the Department. After the challenge, he expressed interest in interning so he could help contribute to our nation's security outside of the challenges.

DDS staff spent the next 8 months and approximately 200 man hours trying to navigate the hiring process to bring the hacker onboard. DDS engaged with the Washington Headquarters Service, the Air Force internship program, and U.S. Army Cyber HR organizations to identify applicable hiring authorities and, more important, the HR specialists who could help drive the hiring actions for a non-traditional, but obviously qualified, candidate.

Unfortunately, what we found was a system ill-equipped to evaluate technical expertise (especially when demonstrated through experience or skill rather than certifications or education) and resistant to leveraging the full flexibilities and authorities provided.

Twice the hacker's resume was rejected as insufficient to qualify him at the necessary grade level for using direct hire authority. Ultimately, the candidate lengthened his resume to a total of five pages, which a classifier reviewed and determined would qualify him for the General Schedule (GS)-4 level, which equates to less than \$16 per hour. (For what it's worth, the GS-5 only requires "experience that provided a knowledge of data processing ... gained in work such as a computer

operator or assistant, [or] computer sales representative...” according to the OPM GS-2210: Information Technology Management Series General Schedule Qualification Standards). We like to point out that he would have qualified if he had worked a year at Best Buy.

Oh, and did we mention he landed on *TIME*'s List of the 25 Most Influential Teenagers of 2018? He is currently studying computer science at Stanford University.

We recognize that it is unreasonable to expect a classification specialist to understand and translate the experience listed in a resume into the education, demonstrated knowledge, and specialized experience requirements that must be met for each grade level in each job series.

The classification specialist may not have known how this particular candidate's listed experience developing “*mobile applications in IonicJS, mobile applications using Angular, and APIs using Node.js, MongoDB, npm, Express gulp, and Babel,*” met or did not meet the classification requirements of “*experience that demonstrated accomplishment of computer-project assignments that required a wide range of knowledge of computer requirements and techniques pertinent to the position to be filled.*”

This is why DDS provided a supporting memo to the classifier that identified where the candidate's resume and classification guide matched. However, the HR office refused to accept the supporting document despite OPM guidance that “*It is entirely appropriate (and encouraged!) to use Subject Matter Experts (SMEs) outside of HR to rate and rank applicants and determine the most highly qualified candidates for a position.*”

Thankfully, our story, like *The President Is Missing*, has a happy ending. When it became clear that we would lose the hacker to a competing offer from the private sector, leaders at some of the highest levels of the Pentagon intervened and ordered their HR office to make the hire. With sufficient visibility and the right people assigned, the hacker's original (one-page) resume was reviewed and used to hire him at a reasonable but still below-market rate. We were ultimately able to hire him, but the process required escalation and is not scalable for more than a small number of hires.

The hacker, now 18, joined DDS as an employee during the summer of 2018 and during that time identified numerous vulnerabilities that threatened the security of information and potentially the safety of our nation.

His story was not isolated to one HR specialist or one service. As a Department, we made it as hard as possible for him to join (all while the private sector offered higher salaries and housing stipends). Hiring him did not require a new law or regulation; it required an understanding of his technical abilities, trust in those who evaluated him, and leadership that prioritizes people over process.