# National Security Agency (NSA) Internship

Rachel Estes

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# Overview Of Program

- Cryptanalysis and Exploitation Services Summer Program (CESSP) is a 12-week program for college students majoring in mathematics or computer science

- This program gives students the chance to put their problem-solving skills to the test and receive valuable work experience at the same time

# Overview Of Summer

- The first week of this internship we heard about all the different projects to choose from and we were allowed to choose our top pick and most worked with a partner

- Throughout the summer, we had many off-site tours of the other agencies and heard presentations about other areas of the agency

- At the end of the summer we wrote a paper and gave a presentation on our technical work to a technical audience

# Summary of Project

- I was presented a software reverse engineering problem whose solution was important to the NSA' success. Working closely with a mentor and partner, analyzed a commercial facial recognition technology, discovered the feature extraction and matching algorithms, evaluated the strengths and weaknesses of the software, and presented out findings in a peer-reviewed, internally-published technical paper

# Challenges Faced

- Getting used to a work environment

- Working with someone I have never known before

- Learning new machine code and reverse engineering

# Classroom Experience

- Worked on a difficult project with a partners and was supported by my project supporter


- Jumped right into your project

# Experienced Gained

- Learning new types of coding

- Working with someone who has the same mindset and willingness to do the project together

# Questions

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