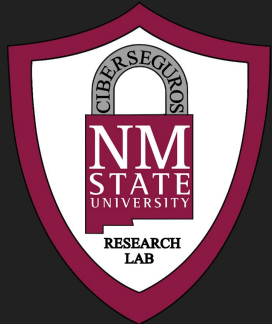


# NMSU

# Reverse Engineering

## Lecture 0 - Safety, Setup, and Vision



Joshua Reynolds  
Spring 2023

# Reverse Engineering

Taking something apart to figure out how it works or is made

In software this can be used to:

1. Steal technology/IP (e.g. patent infringement)
2. Avoid DRM (think 'cracked', pirated software or VLC)
3. Make compatible products (like how LibreOffice can open .docx files)
4. Figure out what malicious programs do, and how to stop them
5. Develop software exploits



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4. **Figure out what malicious programs do, and how to stop them**
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We will study #4 in this course.



# Careers in Reverse Engineering

Senior Research Engineer (Remote)  
Minimum Salary: \$102,900



R&D Cybersecurity Vulnerability  
Research/Reverse Engineering  
Salary Range: 100-150K

Malware Reverse Engineer (Remote)  
Salary Range: 100-150K (Glassdoor)



# Malware Analysis Lab Safety & How class will work

Setup Github

Setup \*nix OS

Setup Hypervisor

Download malware samples

Setup IDE if wanted

Remove Networking

Take Snapshot

Document the process for Lab 0

Take roll!