

# The Web's Biggest Problem: Stopping Bots, Allowing You.

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# Agenda

- Packetware 101 - The Solution Can't Be Visible
- The Environment
- How-To: Differentiating Between Bots And Users
- Securing The Principally Unsecure
- There's More Than One Solution



# What is packetware?

Content delivery &  
cybersecurity for  
the ambitious  
among us

Self started -  
because there  
was no other  
option

Platforms need to  
value humanity more  
– the solution cannot  
be visible

# The Environment

- We reverse proxy content from origins to clients, speeding up delivery and making sure users are real in the process.
- Like a CAPTCHA before you access a webpage, we want to challenge your browser, but invisibly

# Differentiating Between Users And Bots From The JavaScript Window

**What makes a browser like Chrome, Safari, or Firefox legitimate?**

The fundamental differences between browsers that run in a shell and browsers that run on a visual operating system



# An Example Check

```
function retF(arg) {  
    try {  
        return retF(arg+1)  
    } catch (e) {  
        if (arg > 8950 && e.toString() === "RangeError: Maximum call stack size  
exceeded") {  
            return true  
        } else {  
            return false  
        }  
    }  
}
```

# Another Example

```
function pup() {  
  
    let err = new Error('building things that have the capability to  
assist people is food for the soul');  
  
    return err.stack.toString().includes('puppeteer')  
}
```



# Securing The Principally Unsecure

This code is being  
ran on an entirely  
uncontrolled  
environment





# The Game Doesn't Have To Be Fair

We've been thinking about this  
the wrong way



# Objectives

Catching headless  
browsers while  
responding  
dynamically to give  
everyone a fair chance

Keeping the  
legitimacy of  
the challenge

Keeping the  
script small, fast,  
and usable

To meet the ambitious goal that the best platforms go unnoticed!

# Why I'm Applying to Neuralink And Why Neuralink Should Consider Me

- Neuralink is highly ambitious with a large challenge that means so much to humanity
- I'm a hardworking and curious individual that loves working toward solving challenges.

