tapster

valet VISION

SMARTPHONE AUTOMATION ROBOT

Valet Vision Overview

Valet Vision is an all-in-one hardware device designed to enable automated or manual remote control of a smartphone using the versatile Raspberry Pi platform to act as a virtual mouse and keyboard with a camera to view the screen.

This device aims to simplify repetitive tasks, enhance productivity, and enable seamless integration of iOS and Android apps into automated workflows and systems.

Valet Vision is ideal for developers, testers, remote workers, and tech professionals seeking to automate tasks on smartphones without direct manual intervention.

Valet Vision: Automation Robot

Features and Capabilities

- Open source client and server code
- HTTP+JSON API
- App Interactions: USB HID screen touches, swipes, and keystrokes to automate any app or system setting on iPhone or Android
- Visual testing support with OpenCV
- Bring Your Own Magic (Compatible with other image detection AI or machine learning libraries)
- Screenshot and video feed API
- Install, launch, quit, or background any app from the Apple App Store or Google Play Store
- Notifications: Automate handling of incoming notifications
- Data Management: Automate data entry, extraction, and transfer between apps
- Communication: Automate sending of messages, emails, and social media interactions
- IoT Management: Create or modify any Bluetooth, WiFi, Mobile Data connection
- Backup and Sync: Automate backup processes and synchronize data across devices and cloud services

Hardware Specifications

- Core Platform: Raspberry Pi 4 Model B
- Processor: Broadcom BCM2711, Quad-core Cortex-A782 (ARM v8) 64-bit SoC @ 1.8GHz
- Memory: 8GB LPDDR4-3200 SDRAM
- Storage: 64GB MicroSD Card (pre-loaded with Valet software and Raspberry Pi OS)
- Connectivity:
    - Gigabit Ethernet
    - Dual-band 802.11ac wireless LAN
    - Bluetooth 5.0, BLE
    - USB: 2 × USB 3.0 ports, 2 × USB 2.0 ports
- Video & Sound:
    - 2 × micro HDMI ports (up to 4Kp60 supported)
    - 3.5mm analog audio-video jack
- Video Capture:
    - IMX708 12-megapixel sensor with HDR and phase detection autofocus
    - Supported resolutions: 1920x1080, 1280x720
    - Format: MJPEG
- USB HID: Mouse, Keyboard (Android support works out-of-the-box. iOS support requires enabling Accessibility Settings app)
- Power: 5V DC via USB-C connector
- Dimensions: 240mm × 120mm × 240mm
- Weigh: 1248g (without accessories)

Valet Vision: Automation Robot

Software Specifications

- Operating System: Raspberry Pi OS (64-bit version, optimized for Valet)
- Automation Engine: Custom-developed open-source software using Python, OpenCV, and Tesseract OCR
- Supported iPhone Models: iPhone 7 and newer, running iOS 13 or later
- Supported Android Models: Any device that supports USB On-The-Go (Most modern devices)
- Features:
    - Web interface for manual phone control
    - Script creation with Python or any programming language with HTTP & JSON support.

Network Access

- SSH: Enabled by default, password-based SSH authentication provides encrypted access over a network
- VNC: Supported. VNC provides remote desktop support to Raspberry Pi OS
- Remote manual or automated access over the Internet supported with Tailscale.

Package Contents

- Valet Vision hardware (Raspberry Pi 4 Model B)
- 64GB MicroSD Card (with pre-installed software)
- Toolkit with hex drivers and SD card reader
- USB-C Power Supply 27W 100-240V AC 50/60Hz Input. (5.1V / 5A DC Output)

Warranty and Support

- 1-year limited hardware warranty
- 2-business day turnaround email technical support

Intended Use

Valet is designed for legal and ethical use cases only, including software development and testing, personal productivity enhancement, accessibility support, and integration of mobile apps into professional workflows. Users are advised to ensure their use of Valet complies with the terms of service of all involved software and platforms. All Valet purchases are subject to the Tapster Robotics, Inc. Sales Agreement.