

2022

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Director of Product Cybersecurity



CYBERSECURITY FOR CONNECTED AND AUTONOMOUS VEHICLES

About Me



Current Position

Director of Product Cybersecurity, **Aptiv**

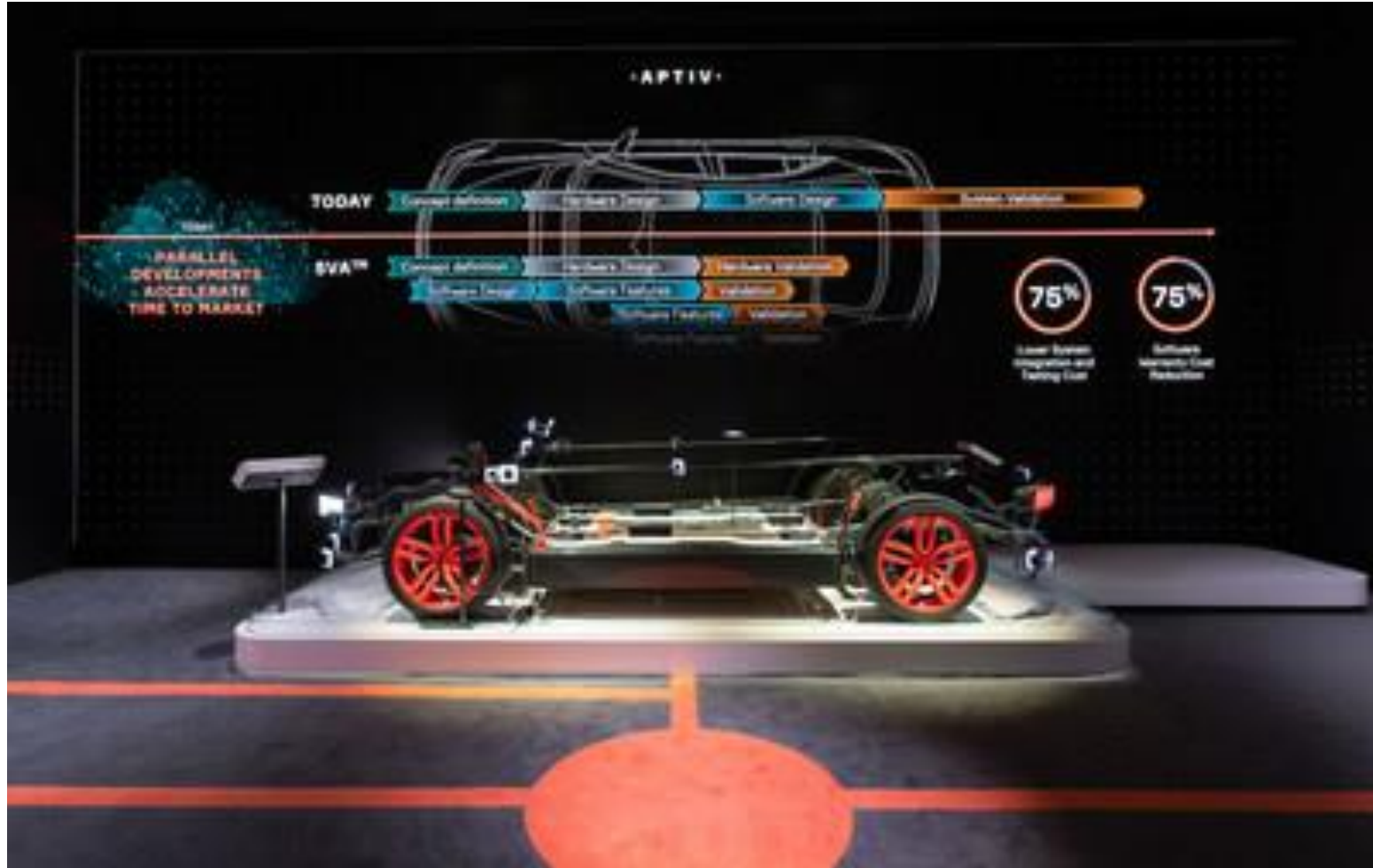
- Education and Standing Committee Chair, **Auto-ISAC**
- Co-Founder & Director of Events, **Women's Security Alliance**
- Aptiv University Ambassador, **Ohio State University**
- College of Sciences and Liberal Arts Advisory Cabinet, **Kettering University**
- Cyber Security Advisory Board Member, **Washtenaw Community College**

Previous Roles



Powertrain

• **A P T I V** •



Connected vehicle ecosystem

ECUs: 120+



USB



Wi-Fi



Cellular (3G, 4G, 5G, LTE)



Bluetooth



Service Tools (OBDII)



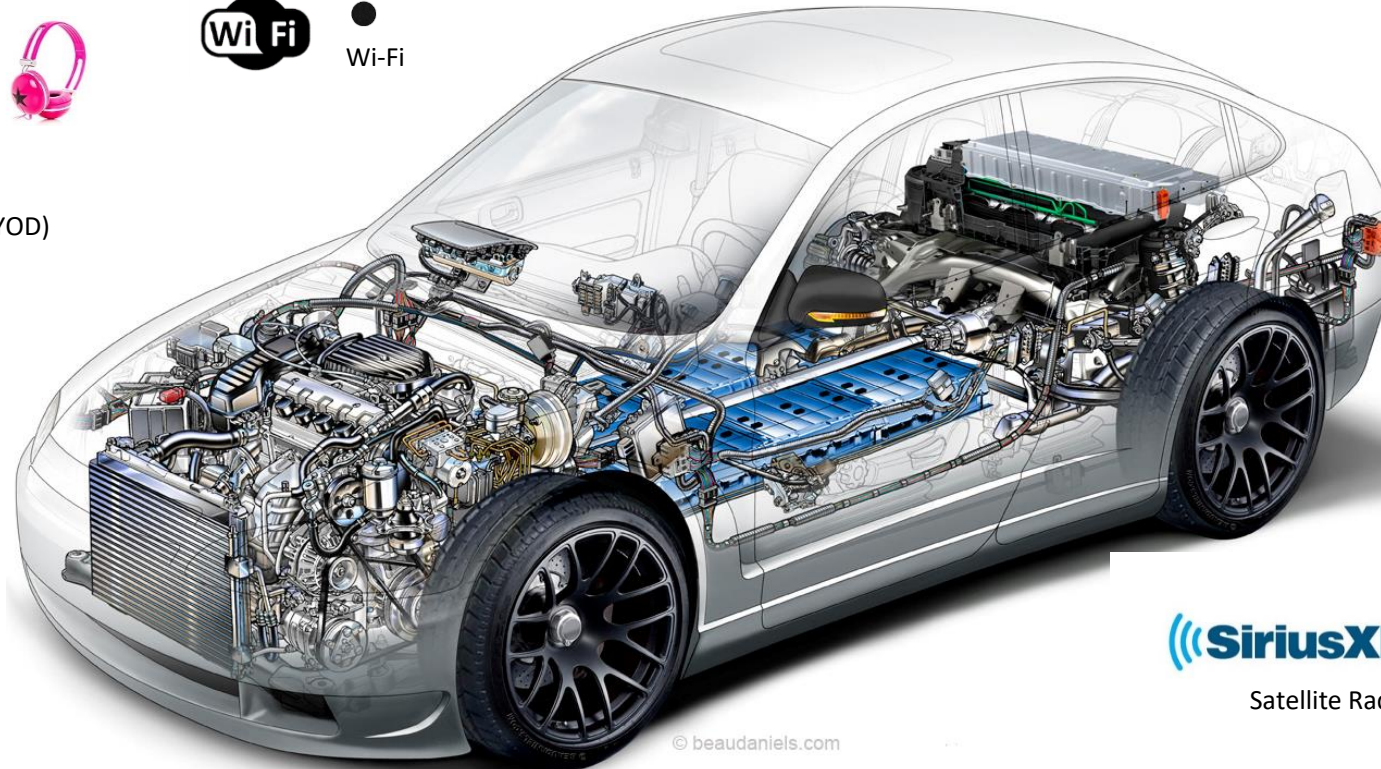
RF Key Fob



Satellite



Satellite Radio

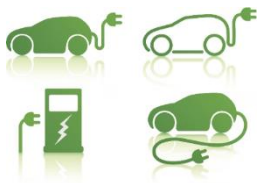


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Brought-in Devices

(aka Bring Your Own Device – BYOD)



Plug-in Electric Vehicle Charging

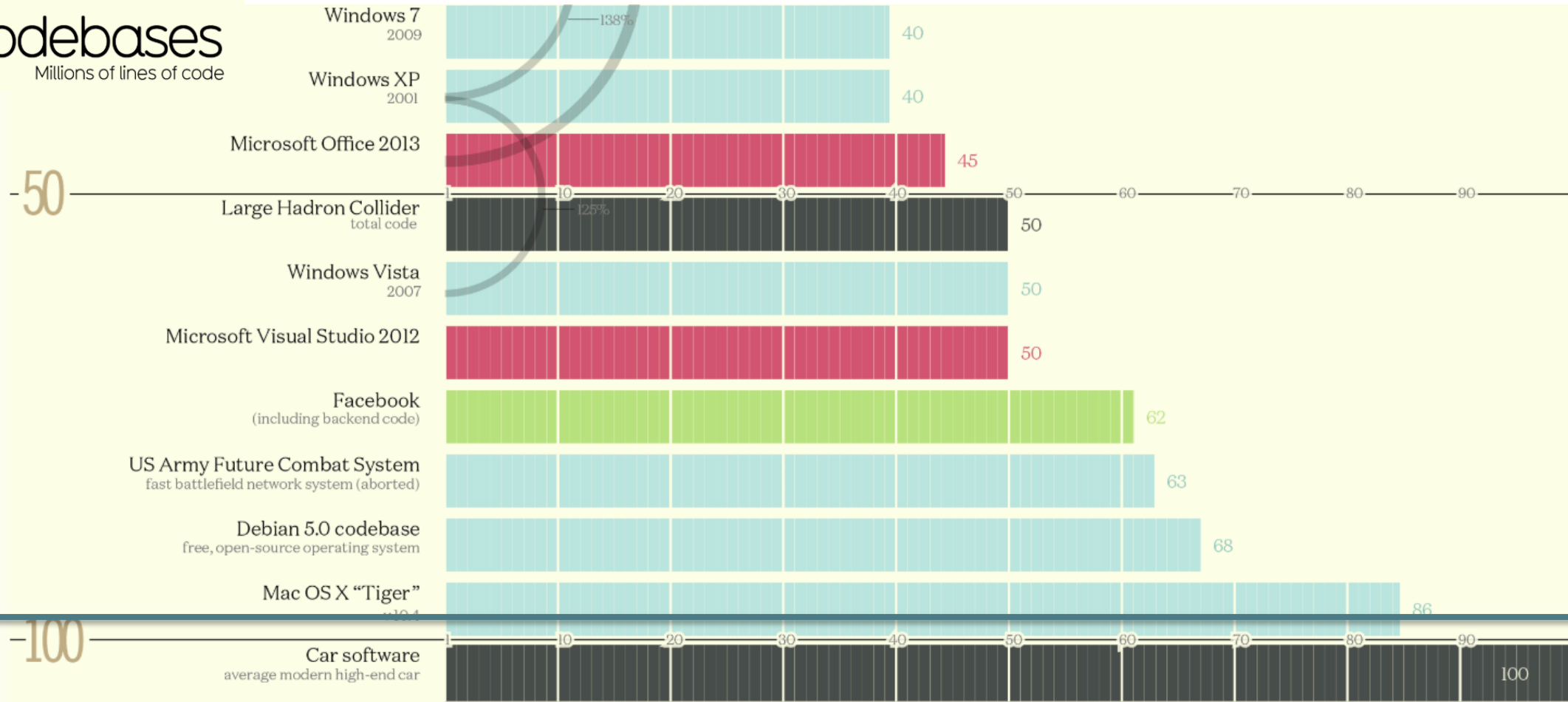


Tire Pressure Monitor

Millions of Lines of Code

Codebases

Millions of lines of code



Auto cyber is complex

Safety-critical systems

Shared components

Long lifecycle

Long consumer usage lifecycle

Highly complex systems

Highly constrained operational parameters

Complex supply chain

Building a Culture of Cybersecurity



Cybersecurity is “Table Stakes” for the connected and autonomous vehicle

BEST PRACTICE GUIDES RELEASE TIMING

TLP Amber Release Date

1. Incident Response	July 2017
2. Collaboration and Engagement with Appropriate Third Parties	March 2017
3. Governance	August 2017
4. Risk Assessment and Management	November 2018
5. Awareness and Training	November 2018
6. Threat Detection, Monitoring and Analysis	November 2018
7. Security Development Lifecycle	August 2019

Release Timing:

- First 3 months after publication: **TLP Amber** - available exclusively to Auto-ISAC Members
- 3 to 9 months after publication: **TLP Green** - released by request to industry stakeholders
- 9 months after publication: **TLP White** - released to the public via the Auto-ISAC website (www.automotiveisac.com), subject to Board of Directors confirmation

ISO/SAE 21434
Published Aug 2021



Women's Security Alliance Benefits

Guidance & Mentorship

Determine career path opportunities

Customized Training Roadmap

Based on cybersecurity standards, frameworks, and best practices

Educational Courses

Enrollment in unique cybersecurity courses

Connections to Funding

Connections to fund training costs

Employment Connections

Visibility into job opportunities

Networking Opportunities

Network with executives, recruiters, and industry experts

- ✓ Join WomSA LinkedIn Group
- ✓ Sign up for Mentorship Program at www.womsa.org

