Tim E. Doughty

Software Engineer

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Mr. Doughty joined Sonoma Technology's Software Engineering and Information Technology Department in 2018. He leads the development of the U.S. Environmental Protection Agency's (EPA) Smoke Sense app, a native mobile application on iOS and Android platforms that is used for the EPA's Smoke Sense health study. His work on the app includes developing a multilingual module to translate the app, along with individualized messaging. Both of these allow users to monitor and receive tips for dealing with their specific wildfire- and smoke-related issues. He also helped design and develop the revamped AirNow mobile app. This app allows users to track air quality in their communities and across the country.

Education

BS, Computer Science, Sonoma State University

In addition, Mr. Doughty also leads the development of Sonoma Technology's own eSIMS Electronic Logbook, used by air quality monitoring agencies across the country to schedule, log, and track their monitoring networks and the equipment that powers them. He leads the team in charge of outreach websites and mobile app projects, and helps ensure that these sites and apps function properly and are adequately serving client needs.

Mr. Doughty also led the development of the new Asia-Pacific Mercury Monitoring Network's website, and was involved with the newly redesigned AirNow website for the U.S. Environmental Protection Agency (EPA). Along with various other internal tasks, he leads the development of Sonoma Technology's corporate website.

Before joining Sonoma Technology, Mr. Doughty worked at DriveSavers Data Recovery, where he led the development of all in-house software projects and played a major role in developing key recovery techniques. He was able to reverse-engineer various physical and virtual file systems, encryption implementations, and malware designs to help recover customer data.

Mr. Doughty has used a variety of programming languages and tools, including Python, C, C++, Objective-C, Swift, Java, Kotlin, JavaScript, Node, ReactNative, ReactJS, SQL, SQLite, PostgreSQL, MongoDB, Git, Jira, and Confluence. He also has extensive experience with WinHex, IDA-Pro, Hex Rays, and other various reverse-engineering and debugging tools.