



Paul Schmiedmayer

Postdoctoral Scholar, Bioengineering

Bio

BIO

Dr. Schmiedmayer is the Assistant Director Digital Health and postdoctoral researcher at the Byers Center for Biodesign at Stanford University, focusing on the applications of computer science innovations in medicine. He focuses on digital health solutions, including AI-driven systems and healthcare interoperability. He is leading the development of the Stanford Spezi framework and ecosystem.

He earned his doctoral degree at the Technical University of Munich, where he studied software engineering, mobile-based systems including smart devices, the applications and integration of machine learning techniques, and the evolution of web service-based distributed systems. He holds a master's and bachelor's degree in computer science from the Technical University of Munich.

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Paul Schmiedmayer's research applies computer science research to medicine, enabling digital health innovations. These include machine learning applications and deployments, heterogeneous connected devices, health data standards such as FHIR, and software engineering best practices.

He leads the development of the Stanford Spezi framework and ecosystem, enabling the rapid development of digital health innovations. He is a co-instructor of the Building for Digital Health (CS342) course.

LAB AFFILIATIONS

- Josh Makower, Byers Center for Biodesign (9/26/2022)
- Oliver Aalami, Stanford Spezi (9/26/2022)

Publications

PUBLICATIONS

- **Quantitative DigiToGraphy: a Comprehensive Real-Time Remote Monitoring System for Parkinson's Disease.** *Research square*
Hoffman, S. L., Schmiedmayer, P., Gala, A. S., Wilkins, K. B., Parisi, L., Karjagi, S., Negi, A. S., Revlock, S., Coriz, C., Revlock, J., Ravi, V., Bronte-Stewart, H.
2024
- **Utility of smart watches for identifying arrhythmias in children.** *Communications medicine*
Zahedivash, A., Chubb, H., Giaccone, H., Boramanand, N. K., Dubin, A. M., Trela, A., Lencioni, E., Motonaga, K. S., Goodyer, W., Navarre, B., Ravi, V., Schmiedmayer, P., Bikia, et al
2023; 3 (1): 167
- **CardinalKit: open-source standards-based, interoperable mobile development platform to help translate the promise of digital health.** *JAMIA open*

Aalami, O., Hittle, M., Ravi, V., Griffin, A., Schmiedmayer, P., Shenoy, V., Gutierrez, S., Venook, R.
2023; 6 (3): ooad044

- **Reducing the Impact of Breaking Changes to Web Service Clients During Web API Evolution**

Schmiedmayer, P., Bauer, A., Bruegge, B., IEEE
IEEE COMPUTER SOC.2023: 1-11

- **Global Software Engineering in a Global Classroom**

Schmiedmayer, P., Chatley, R., Bernius, J., Krusche, S., Chaika, K., Krinkin, K., Bruegge, B., IEEE Comp Soc
IEEE COMPUTER SOC.2022: 113-121