Biomedical Informatics Grand Rounds

Wednesday, April 9, 2025
3:00 pm – 4:00 pm

Breaking Barriers: Biomedical AI Programming for Novice Programmers with Wind Surf

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Remote Access
Join Zoom Meeting https://stonybrook.zoom.us/j/95617197636?pwd=KytzZ2pVRG9SZGpKZUtpNXJISjNjZz09
Meeting ID: 956 1719 7636 Passcode: 924293

Bio: Joseph Balsamo, BS , is currently a Supervising Programmer in Biomedical Informatics at Stony Brook University and is passionate about making cutting-edge technology accessible to novice programmers. He began his informatics career at Stony Brook's Health Sciences Library, focusing on data management and analysis, before joining Biomedical Informatics in 2013 to work on data analysis, pathology imaging, machine learning, and chat tools. During the COVID pandemic, he contributed to a team that developed several chatbots to support public health efforts. He facilitates a weekly Hack-a-thon at Stony Brook, training attendees in innovative programming techniques and tools.Joseph Balsamo, BS , is currently a Supervising Programmer in Biomedical Informatics at Stony Brook University and is passionate about making cutting-edge technology accessible to novice programmers. He began his informatics career at Stony Brook's Health Sciences Library, focusing on data management and analysis, before joining Biomedical Informatics in 2013 to work on data analysis, pathology imaging, machine learning, and chat tools. During the COVID pandemic, he contributed to a team that developed several chatbots to support public health efforts. He facilitates a weekly Hack-a-thon at Stony Brook, training attendees in innovative programming techniques and tools.

Abstract: This presentation introduces novice programmers to biomedical AI programming through the lens of AI coding tools like Wind Surf. We will explore the latest advancements in large language models (LLMs), which have evolved rapidly in recent years. After examining the landscape of available AI coding tools, we will dive into Wind Surf—an innovative IDE leveraging Cascade technology and multi-language support—to demonstrate how it simplifies programming for beginners. This presentation will also explore Vibe Programming, showing how AI tools like Wind Surf empower medical and research professionals in biomedical AI by boosting their skills/knowledge and not replacing the learning process. Through engaging video demonstrations, participants will see Wind Surf applied to biomedical tasks such as data analysis and model development. Attendees will leave with a practical understanding of how these tools democratize AI programming, enabling novice programmers to contribute to biomedical innovation.

Educational Objectives:
1. Participants will grasp the evolution and impact of large language models (LLMs) in AI coding tools.
2. Listeners will understand the role of AI coding tools in biomedical programming.
3. Participants will master the basics of Wind Surf for biomedical AI tasks.
4. Attendees will build confidence to start biomedical AI projects as a non-programmer.

Disclosure Statement: The faculty and planners have no relevant financial relationship with ineligible companies, whose primary business is producing, marketing, selling, reselling, or distributing health care products used by or on patients.

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