Josh Kean
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Programming Languages, Libraries, and Frameworks
Python, JavaScript, Rust, Solidity, React, Truffle, Bitcoin Script, Git, Linux

Recurse Center
A self-directed, 12 week retreat for computer programmers.
August 2019 – Present, Participant

Music Synthesizer
- Utilized parallel processing programming methods to play multiple sounds at once.
- Created .wav sound files using NumPy and adjusting wavelength attributes.
- Programmed an adjustable GUI that creates and plays different note sequences simultaneously.

Mnemonic Phrase Generator
- Built a library that performs elliptic curve multiplication and addition.
- Implemented BIP-39 to create mnemonic phrases and Bitcoin private keys.
- Wrote a testing suite to ensure all functions generated the desired output.

Snake Game
- Developed a script that auto-generated multi-hundred item hash maps.
- Devised a class structure to streamline communication between data structures.
- Created different program conditions that affected the difficulty of the game.
- Implemented keyboard controls to let players control game elements.

Independent Study
- MIT course on data structures and algorithms.
- Solving practice problems in Understanding Cryptography using Rust.
- Reviewing the proposed Taproot and Schnorr signature Bitcoin soft fork proposal.

Past Work Experience
Underground Construction, Project Engineer
June 2017 – July 2019
- Wrote Microsoft Excel macros that improved project documentation methods.
- Managed multi-million dollar airport construction projects.
- Prepared monthly financial reports for multiple construction projects.

Education
San Francisco State University, BS in Mechanical Engineering
December 2016

Calculus	Physics	Differential Equations
C# Programming	Digital Signal Analysis	Automatic Control Systems