Vehicular Remote Online Ocular brain-Machine-interface - VROOM

CruX Team 2

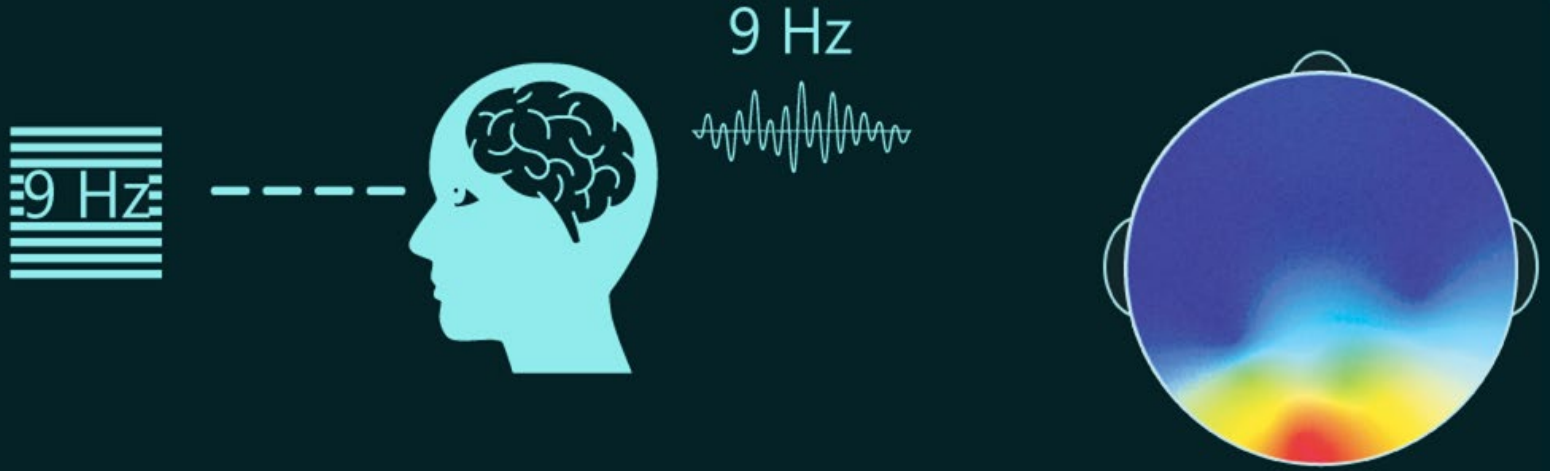
Project Lead: Mateo Umaguing
Project Scientists: Avantika Aggarwal, Hanna Boughanem, Paige Lee, Sree Nagaraj, Srivarsha Rayasam, Anish Thalamati
Mechanical Engineer: Audrey Ngai

SSVEPs

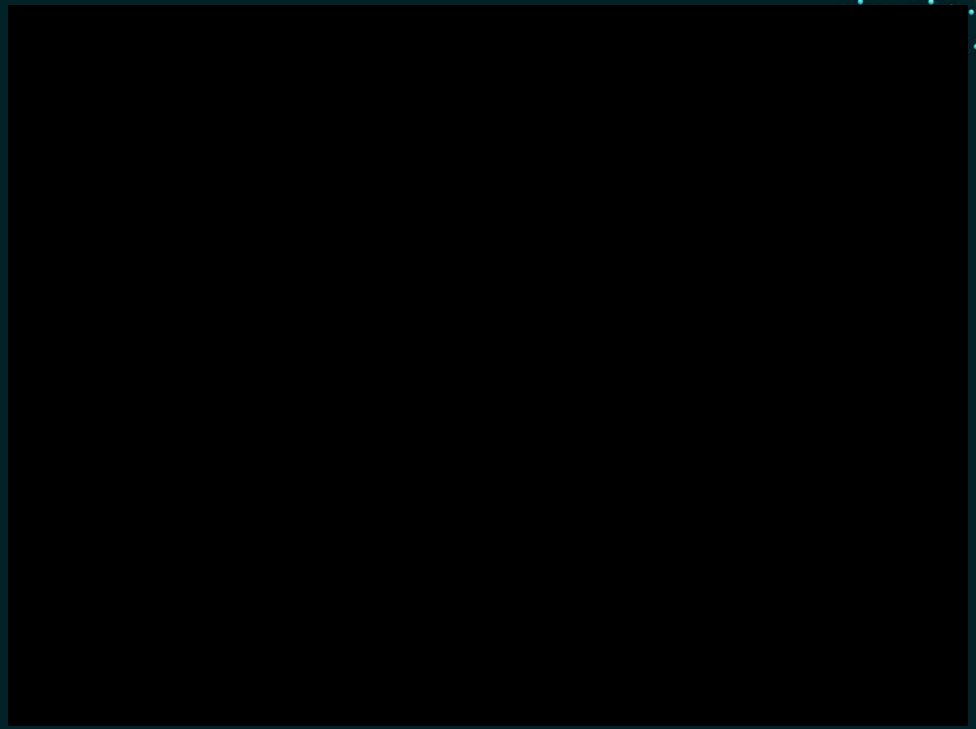
CLASSIFICATION

DATA

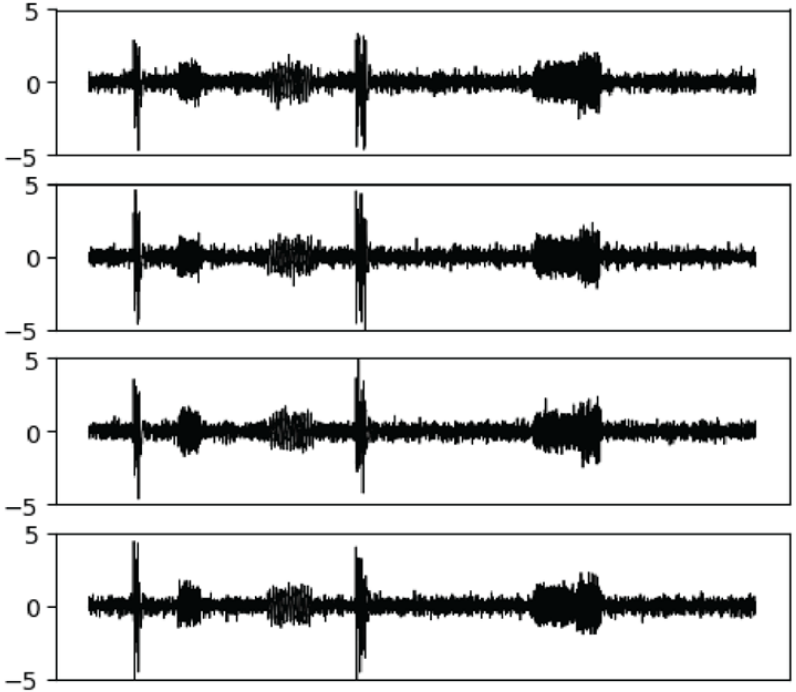
SSVEP Review

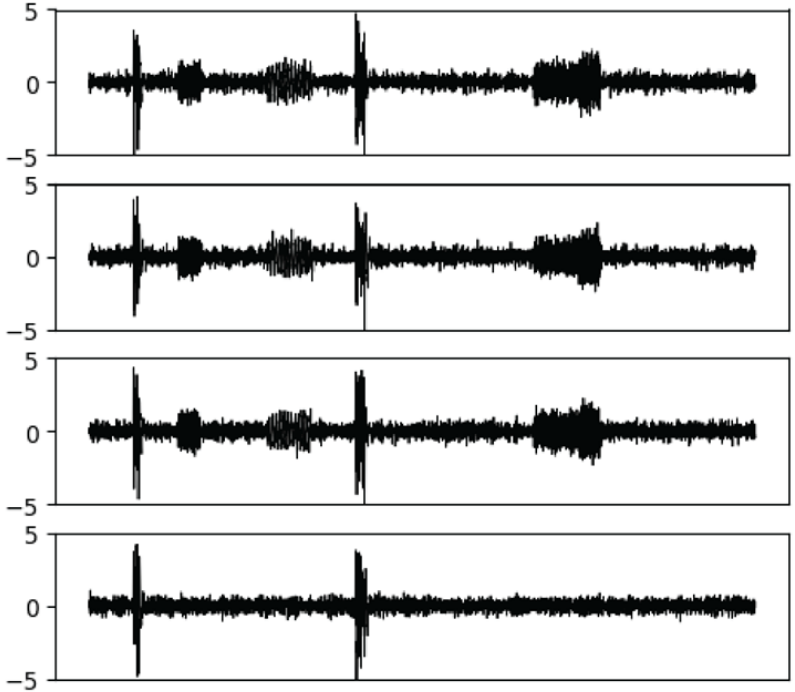


SSVEP Review



Simulated Data





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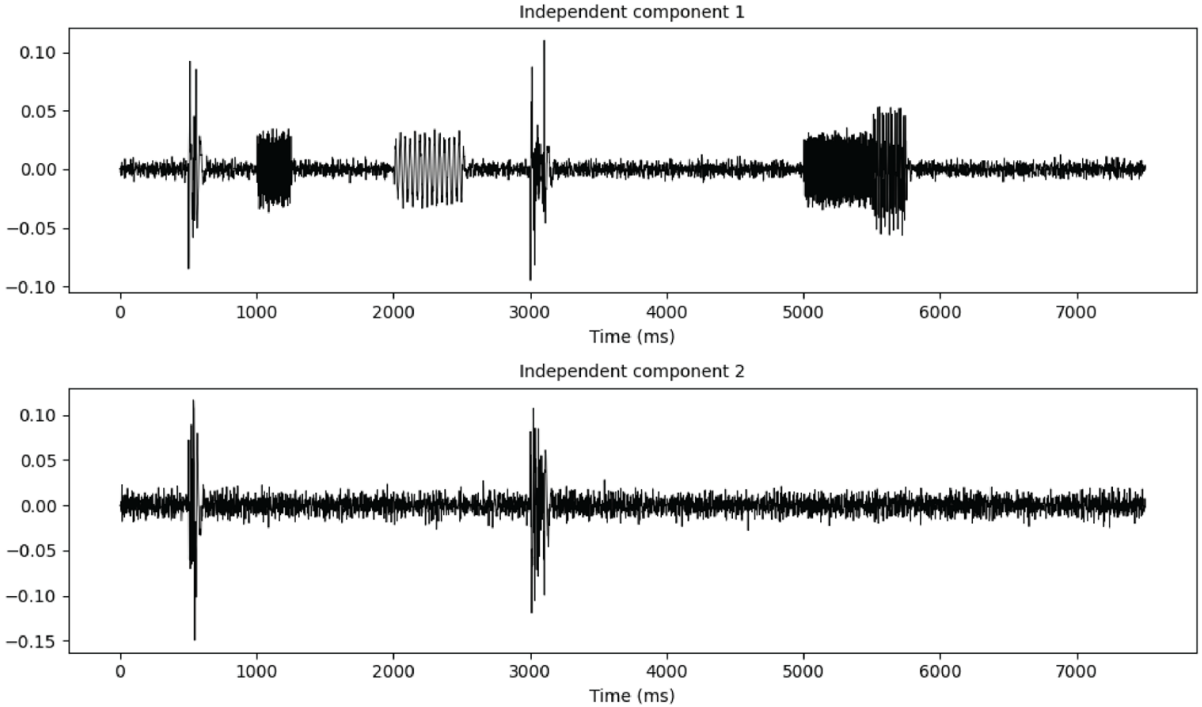

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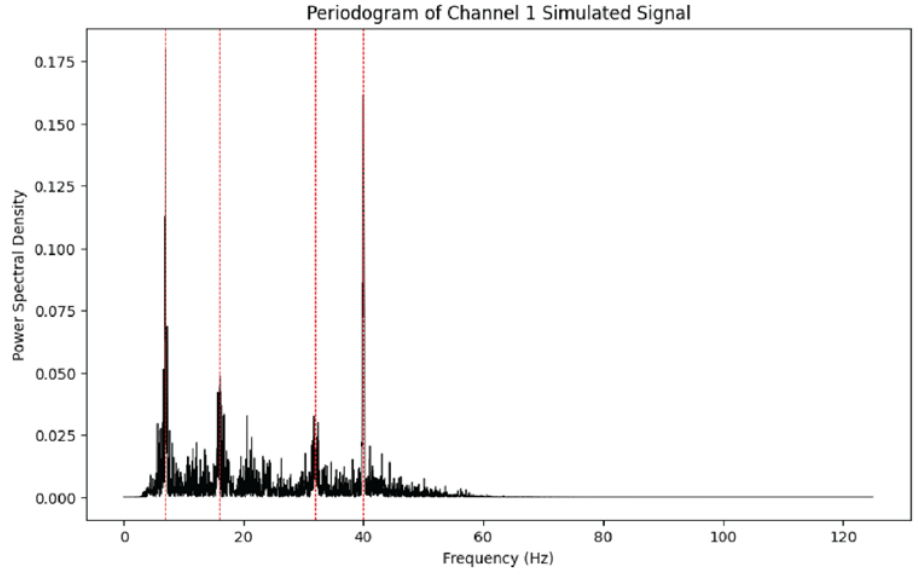

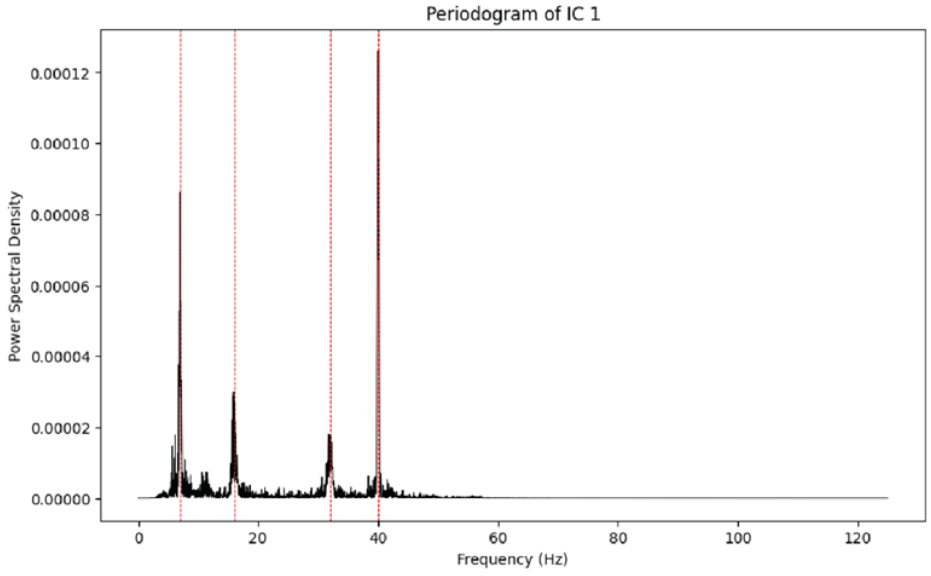

Data Collection

SSVEP Classification Algorithms

$$\rho = \frac{a^T \sum_{XY} b}{\sqrt{a^T \sum_{XX} a} \sqrt{b^T \sum_{YY} b}}$$

$$T(a,b) = \frac{1}{\sqrt{a}} \int_{-\infty}^{\infty} x(t) \psi^* \frac{(t-b)}{a} dt$$

$$\frac{1}{2} w^T w + C \sum_{i=1}^{l} \xi$$

“The light at the end of the tunnel might be an oncoming train.”

—Random Internet Person

“The light at the end of the tunnel might be ~~an oncoming train.~~”

the flashing of a flickering screen to induce steady-state visual-evoked potentials to be used in an awesome BCI that can help disabled people in the future or something