Phantom Limb Pain Strap

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What is Phantom Limb Pain (PLP)?

- Painful sensation coming from the amputated limb
  - The limb is no longer there, but the pain is real
- 185,000 amputations a year
  - 54% from Diabetic causes
  - 45% from traumatic events
- Up to 80% of amputee patients suffer from PLP
Project Overview

➢ **Primary Goal**: alleviate pain using E-stim
  ○ Adjustable strap with reusable electrodes

➢ **Secondary Goal**: integrate sensors that will monitor blood glucose levels
  ○ Possibility of measuring blood oxygen levels, BP, heart rate, and other vital stats

➢ All parameters will be displayed in a **user-friendly mobile application** for the patient’s convenience
CSE Role - Mobile App

➢ Record:
  ○ Frequency of use
  ○ Data collected from sensor

➢ Goals:
  ○ User-friendly interface
  ○ Convert raw data to interpretable graphs

➢ Challenges:
  ○ Data encryption
  ○ Data protection

➢ Potential features:
  ○ Use as remote control
  ○ Sharing data with medical professionals

Hello, User!

Weekly Breakdown
Thanks!

Any questions?
Team Members Contacts

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