Artur Śmiechowski

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Primary Skills

General BSL 2 Lab methods, 3D Bioprinting

Object Oriented Programming and Machine Learning-(Python, Java, C#, C++)

Autodesk Solidworks and Maya, ADS

Bioinformatics and Computer Aided Drug Design

Work Experience

Undergraduate Researcher EBRL / Pediatric Pre-OP VR / Self Healing Alginate-Pluronic Gel / Cardiac Tissue Adhering PVA Patches
September 2020 - , Burlington, VT

Designed and constructed prototypes for headset mountings for pre-op use on children. CAD heavy work with 3D printing and material selection focus for ease of sterilization.
Working on methods to produce cadherin-alginate hydrogel conjugates for tissue targeting drug delivery and surface treating PVA patches for tissue adherence.

Undergraduate Researcher Glass Brains Lab / Passive Time Dysphoria
September 2020 - , Burlington, VT
Collecting and analyzing EEG data from patients with and without depression during periods of waiting. Investigating the correlation between mood and boredom using machine learning on EEG datasets.

Teaching Assistant / EE 101 / BME 296
January 2021 - , Burlington, VT

Oversaw microcontroller lab class. Assisted students with circuit design and C code for a variety of microcontroller applications.

Assisted students in Brain Computer Interfaces course using Python and machine learning to filter and analyze large EEG datasets.

Education

University of Vermont / Biomedical Engineering (Cell and Tissue)
August 2018 - Current, Burlington, VT

Minors in Electrical Engineering and Mathematics

Additional Coursework in Pharmacology and Genetics
Current Cumulative GPA : 3.70

Honors/Awards

Elk's Foundation Most Valued Student Scholarship

Rutland Regional Medical Center Scholarship

Xerox Award for Innovation in Science and Math

UVM Dean's List 2018/2020/2021

Nasa Vermont Space Grant

Special Interests / Other

Tissue Engineering, Hybridomas, RF Circuits, Bioinformatics, Drug Design, Organic and Biochemistry, 0451 Game design. I do many small scale electronics and code based projects from function (automatic gardens) to fanciful (cosplay electronics).