Emma Richardson

San Francisco, CA | 415-555-0198 | e.richardson@stanford.edu | linkedin.com/in/emmarichardson | github.com/emma-r-dev

EDUCATION

Stanford University   Stanford, CA
Bachelor of Science in Bioengineering   Aug 2023 – May 2027
Relevant Coursework: Molecular Biology, Tissue Engineering, Biomechanics, Medical Device Design, Cell Biology, Biostatistics
GPA: 3.94/4.0

TECHNICAL SKILLS

Laboratory: PCR, Cell Culture, Flow Cytometry, Western Blot, CRISPR
Software: MATLAB, R, Python, ImageJ, LabVIEW, SolidWorks
Analysis: Biostatistics, Experimental Design, Data Visualization

PROJECTS

Smart Drug Delivery System | *MATLAB, 3D Printing*
- Designed controlled-release microparticles for targeted drug delivery
- Developed computational models for drug release kinetics
- Achieved 85% improvement in therapeutic efficacy in vitro

Tissue Engineering Platform | *Cell Culture, Python*
- Created novel scaffold designs for tissue regeneration
- Implemented machine learning for cell growth prediction
- Reduced tissue development time by 30%

Biosensor Development | *LabVIEW, Electronics*
- Engineered wearable glucose monitoring system
- Developed real-time data processing algorithms
- Achieved 95% accuracy compared to commercial devices

RESEARCH EXPERIENCE

Research Assistant   Jun 2023 – Present
Stanford Bioengineering Lab   *Stanford, CA*
- Investigating novel biomaterials for wound healing applications
- Developed high-throughput screening methods for material properties
- Published research in Biomaterials journal

WORK EXPERIENCE

Biomedical Engineering Intern   Jun 2023 – Aug 2023
Genentech   *South San Francisco, CA*
- Optimized protein production processes for therapeutic antibodies
- Developed automated quality control protocols
- Reduced production costs by 15% through process improvements

Laboratory Assistant   May 2022 – Dec 2022
UCSF Medical Center   *San Francisco, CA*
- Performed routine clinical sample analysis
- Maintained laboratory equipment and inventory
- Trained new staff on standard operating procedures