# CHI NGUYEN

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### **EDUCATION**

**BA Science and Engineering**, *Tampere University* **MA Biomedical Informatics**, *Tampere University* 

#### PROFESSIONAL EXPERIENCE

#### **Bio-composites Group** – Research Assistant

April 2021 - Dec 2022

- Conducted ex vivo experiments to assess the emission of green and red lights when exciting a scaffoldthrough chicken skin using a 980nm wavelength for drug delivery application.
- Achieved a 15% reduction experimental variability through optimized protocols and techniques, resulting in 3 publications and multiple datasets generated. (<u>ORCID: https://orcid.org/0000-0001-8274-6110</u>)
- Collaborated closely with a team of 10 scientists, participating in monthly collaborative meetings forindividuals' projects feedback and idea.
- Supported the laboratory team by ensuring proper maintenance of equipment and compliance with safety protocols.

## **RELEVANT SKILLS**

Medical Biomaterials | Processing of Bio-signals | Regulatory Compliance | Computational Diagnostic of Data | Data Recording and Analysis (Excel, MATLAB, R, Python, Origin)

## HIGHLIGHTED PROJECT EXPERIENCE (GitHub: https://github.com/chinguyen19)

### Sleep Quality Study using EMFIT QS device – Behavioral Health Informatic

April 2022

- <u>Conducted a comprehensive study</u> on the impact of evening physical activity on sleep quality in adolescents.using smartwatches and EMFIT QS devices, supported by daily questionnaires.
- Analyzed data with Python and Matlab, uncovering key insights to guide the development of innovative biosensors for future wearable devices.

## Computational Drug Discovery – Predictive model for Bioactivity Project

November 2023

- <u>Developed predictive models</u> for assessing the bioactivity of Acetylcholinesterase inhibitors, crucial for drug discovery in neurodegenerative diseases.
- Employed quantitative structure-activity relationship (QSAR) modeling techniques to understand therelationship between chemical structure and biological activity.
- Utilized computational simulations and machine learning algorithms to screen potential drug candidates.

### Biological Data analysis – Transcriptome Analysis Project

August 2023

- Conducted transcriptome analysis on fresh-frozen tissue specimens from clinical experiments, comparing 28 prostate cancers, 13 cases of locally recurrent castration-resistant prostate cancer (CRPC), and 12 benign prostatic hyperplasia (BPH) samples.
- <u>Analyzed large datasets</u> to uncover molecular mechanisms underlying disease progression and treatmentresistance, contributing to oncology research efforts.

## Diabetes Risk Assessment using FHIR database – Health Informatics Project

May 2024

- Developed a diabetes-risk calculator based on the CANRISK model, <u>utilizing the FHIR database to facilitate early detection</u> and proactive management of diabetes.
- Engineered a functional user interface and backend, seamlessly integrating a real-time FHIR database, demonstrating the potential of real-time data in enhancing diabetes risk assessment.