Efrain Ceh Pavia

MY-WEBSITE-GIT-MAIN-EFRAINCEH.VERCEL.APP

☎ 437-987-3596   ✉   github   linkedin

PROJECTS

CCLASS POP1 Website | *TypeScript, Google Apps Script, Firebase Real Time Database, Tailwind CSS*   Website
- A website to showcase the league standings, game scores, and player statistics for CCLASS Population 1 competitive gaming
- Website implementation using a React/NextJs framework
- Data import from Google Spreadsheets to Firebase using Google Apps Script
- Responsive design and display using Tailwind CSS

Snake and Tacos | *Java*   Code
- Java implementation of the popular SnakeGame, with tacos!
- A player can play Adventure mode or versus a Non-Player Character that uses a Breadth-First search algorithm

KAT: Kmer Alignment Tool | *C++*   Code
- Utilized Suffix Arrays/Burrows-Wheeler Transform to accelerate pattern searches for text alignment
- Reduced initial runtime 3-5 fold by switching to references and pointers

Loupe Antibodies Extraction | *Python*   Code
- Data import from Google Spreadsheets to Firebase using Google Apps Script
- Website implementation using Next Js

PROFESIONAL EXPERIENCE

Scientist I   Nov. 2021 – Present
Treadwell Therapeutics   *Toronto, Ontario, Canada*
- Wrote the *Loupe Antibodies Extraction* script to recover antibody amino acid sequences from BEAM-Ab experiments.
- Wrote a Python GUI for *Endotoxin Analysis*.

Scientist II   April 2019 – Nov. 2020
Grifols Diagnosts Solutions   *Emeryville, California, US*
- Designed and expressed Coronavirus proteins that were used in a lateral flow assay

PostDoctoral Researcher   Sept. 2017 – April 2019
University of California Santa Cruz   *Santa Cruz, California, US*

PostDoctoral Researcher   Jna. 2015 – Nov. 2016
University of Manchester   *Manchester, UK*

EDUCATION

University of Manchester   Manchester, UK
PhD in Biochemistry   *Aug. 2014*

Universidad Autonoma de Yucatan   Merida, Mexico
B. Eng. Chemical Engineering   *Aug. 2009*

Ecole Nationale Superieure de Chimie de Clermont-Ferrand   Clermont-Ferrand, France
B. Eng. Chemical Engineering   *Aug. 2007*

TECHNICAL SKILLS

Advanced ⭐⭐⭐ Intermediate ⭐⭐ Basic ⭐

Languages: Java ⭐⭐, Python ⭐⭐, C++ ⭐⭐, SQL ⭐, JavaScript ⭐, HTML/CSS ⭐
Frameworks: Flask ⭐⭐, JUnit ⭐
Developer Tools: Visual Studio ⭐⭐, Eclipse ⭐⭐, Git ⭐, Google Cloud Platform ⭐
Libraries: Added if needed

Publications

- **Ceh-Pavia E**, Ang SK, Spiller M, Lu H. The disease-associated mutation of the mitochondrial sulphydryl oxidase Erv1 impairs cofactor binding in the catalytic intermediates. 2014

- **Ceh-Pavia E**, Spiller M, Lu H. Folding and biogenesis of mitochondrial small Tim proteins. 2013