Patrick Chan

✉ patrick@patchan.ca | 🏠 patchan.ca | in chanpat | ⌗ patchan

Skills

Languages	Java, TypeScript, JavaScript, Python, C++, R, HTML, CSS
Tools & Frameworks	Git, Node.js, Yarn, JUnit, Mocha, Chai, REDCap, LaTeX

Work Experience

UBC Aging, Mobility, and Cognitive Neuroscience Lab   Nov 2016 – Jun 2019
Research Assistant   *Vancouver, BC*

- Study coordinator for 6-month randomized controlled trial on sleep, aging, and cognition in seniors
- Developed and managed multiple Redcap databases and FileMaker Pro databases for longitudinal studies
- Processed cognitive data using R and Excel, and used MotionWare to process sleep data
- Recruited and screened participants, administering cognitive tests and physical assessments

BC Children's Hospital Research Institute, Amed Lab   Jan 2015 – Sep 2015
Research Assistant (Co-op)   *Vancouver, BC*

- Co-managed 2 studies on pediatric diabetes, collected data, and performed preliminary data analysis
- Assisted with study design related to recruitment, logistics, and data collection and management
- Recruited patients in clinics at BC Children's, Surrey Memorial, and Abbotsford Regional Hospital

Providence Health Care Research Institute, Orthopaedics   May 2014 – Dec 2014
Research Assistant (Co-op)   *Vancouver, BC*

- Independently managed over 6 foot and ankle orthopaedic research studies
- Actively practiced research ethics, developing study protocols and ethics applications
- Recruited participants, coordinated study clinic visits, and administered questionnaires

Projects

Potatofy | Python

- Questrade integrated desktop GUI application for rebalancing investment portfolios
- Calculates the number of assets to buy and sell to achieve target asset allocations
- Securely requests user financial information through the Questrade API using OAuth 2.0 authentication

InsightUBC | TypeScript, JavaScript

- Full stack software engineering project for querying course and building datasets
- Built a database of course and building data and implemented an interpreted Abstract Syntax Tree (AST) query language
- Implemented REST endpoints to handle dataset and query API requests from a front-end controller

MemoMaker | Java

- Music memo notation GUI application allowing users to save and display a text based representation of music

Education

University of British Columbia   Sep 2019 - Present
Bachelor of Computer Science (Integrated Computer Science)   *Vancouver, BC, Canada*

- Overall GPA: 92.1%
- Expected graduation: December 2021

University of British Columbia   Sep 2011 - May 2016
Bachelor of Science in Integrated Sciences (Physiology, Neuroscience)   *Vancouver, BC, Canada*

- Overall GPA: 86.3%
- Graduated with Distinction, Co-operative education program