# Patrick Chen

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## EDUCATION

**Cornell University, College of Engineering**                                    **Ithaca, NY**
*Candidate for Bachelor of Science*                                          *Expected May 2024*
- Major: Computer Science | Minor: Math
- Cumulative GPA: 3.5
- Relevant Coursework: Computer Vision, Embedded Systems, Analysis of Algorithms, Machine Learning, OOP and Data Structures, Data Structures and Functional Programming, Discrete Structures, Python, Linear Algebra, Multivariable Calculus

## EXPERIENCE

**Pegasystems**                                                              **Remote**
*Software Developer Intern*                                          *May 2022-August 2022*
- Assisted the Next Best Action Designer team by developing software utilizing PEGA Platform for the Customer Decision Hub
- Implemented Agile/Scrum methodology and participated in the development of business requirements into user stories
- Enhanced user experience by decreasing latency and implementing features such as landing pages and responsive displays

**U4Ea**                                                                     **Remote**
*Software Developer Intern*                                   *December 2021-January 2022*
- Generated a database of over 2500 synonyms for a text mood analyzer by web scraping using Python and BeautifulSoup
- Automated scoring of large pieces of media such as articles and song lyrics by developing a sentiment analysis program
- Employed natural language processing to compute relevant heuristics based on user inputted song names using Genius API

**The Wardrobe**                                                             **Ithaca, NY**
*Backend Developer*                                             *September 2021-May 2022*
- Improved scalability and maintainability by assisting in rebuilding a website to allow Cornell students to place and track orders
- Implemented a database for creating or managing users and processing 200+ orders per semester using Node.js and Express
- Staffed a winter pop-up shop which distributed professional and winter clothing to 300+ Cornell students free of charge

## PROJECTS

**Stabler Coin: Cornell FinTech Club x Avalanche Hackathon -** *Javascript/Blockchain*          *April 2022*
- Stabler Coin is an over-collateralized, decentralized, and diversified stable coin that pays users interest simply for owning coins
- Worked in a team of four to create a smart contract and mint a token using Solidity for use on a MetaMask compatible website
- Focused on developing the frontend of the web applications using React.js/TailwindCSS and displaying data using charts.js

**Risk -** *OCaml*                                                    *February 2022-May 2022*
- Implemented a terminal-based version of the popular board game Risk, allowing for local play for up to four players at a time
- Spearheaded the development of the fortify portion along with assisting with the attack stage and control line output/user input
- Created a dynamic GUI using Bogue to display the changing territory troop count and owners based off the terminal game state

**My Journal -** *Full Stack Development*                              *January 2022-April 2022*
- A web application that allows users to create an account and then create private or public journal entries that other users can see
- Individually developed the frontend and backend using the MERN (MongoDB, Express.js, React.js, Node.js) technology stack
- Secured user account information in a database using MongoDB Atlas and bcrypt.js to prevent tampering with passwords

**Big Red Talks -** *Backend Development*                                    *January 2022*
- Mobile application that connects verified Cornell students to a live campus-wide chatroom where they can interact with others
- Developed a RESTful API to host different users and messages using Node.js, Express.js, Mongoose, and MongoDB Atlas
- Deployed the backend as a live server using Heroku for use on multiple devices and for live communication with the frontend

## SKILLS & INTERESTS

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|---|---|
| Languages | Java, Python, Javascript, OCaml, HTML, CSS |
| Technologies | Node.js, React.js, Express, MongoDB, Git, Postman, Pega Platform, BeautifulSoup, VSCode |
| Activities | The Wardrobe, Cornell Computer Reuse Association, Intramural Volleyball |