

CHANNING PEAR

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EDUCATION

2014-2018 **University of Texas at Austin, B.S. Computer Science, Business Minor** **Austin, TX**
Turing Scholar, Computer Science Honors Program (3.8 GPA)

WORK EXPERIENCE

Spring 2018 **Spectrogram, Founder and CEO** **New York, NY**
- Present Music tech company combining sound and sight. Products include audio visualization, recognition, and VR apps
- Audio visualizations are complete and being sold on clothing/paintings/posters to build a consumer base
- Visual-to-audio recognition and Synesthesia VR app are currently in development

Spring 2017 **Convergent, Board Member, Co-Director of Product Mgmt. & Incubator** **txconvergent.org | Austin, TX**
- Present Convergent is a newly-formed organization enabling innovation at the intersection of technology, business, and design
- Launched, grew, and directed 100+ member "Build Team Program" (hands-on product development education)
- Directed Convergent Incubator which is responsible for ~36% of the university's current distinguished startups
- Expanding Convergent to other premier college campuses as member of five-person alumni board

Summer 2017 **Stripe, Software Engineering Intern** **San Francisco, CA**
Designed and implemented Stripe's continuous integration system 'MergeBot' on a team of three
- The system lies in the critical path of the software development workflow, so had to carefully plan for rollout
- Managed to implement through GitHub API calls instead of through a hosted instance of git like Twitter does
- Proposed internal profile seating chart project and developed it on a team of three interns. Code in production!

Summer 2016 **Google, Software Engineering Intern** **Mountain View, CA**
Designed and implemented high-performance open-source Java distributed tracing API for the Google Cloud Platform
- Over 80% of Google's production services use the system, Census, to track RPC latency and for debugging
- Simplified internal codebase and developed a native implementation from the ground up for open-source release
- Heavily contributed to the design of distributed tracing API's in other languages (Go, C++)

Summer 2015 **Bloomberg LP, Software Engineering Intern** **New York City, NY**
Developed premium financial analytics software and visualizations for a \$100M target market using React and D3
- Designed and implemented custom visualizations to portray complex financial data
- Connected front- and back-end through HTTP endpoints and restructured 30,000 line front-end codebase
- Implemented backend pipeline to streamline the process of financial engineers validating submitted data

Summer 2014 **Beecher Investors, Software Developer** **Stamford, CT**
Created real-time and historical financial data scraper with excel integration using YQL and the Google Finance API

SELECTED PROJECTS

PacMan AI Reinforcement-learning-based PacMan AI using TensorFlow
Face Detector Achieved 89% accuracy through support vector machines and sliding window comparisons
ML Scheduler Implemented FIFO, LIFO, SJF, SRT, and custom machine learning-based process schedulers
Web Crawler Indexes and searches a subset of the web. Supports compound queries and efficient phrase searching
Swim Scope Web app that lets you compare the times of groups of swimmers. Developed with Python, Selenium, Flask, MongoDB
L++ Implemented a functional programming language with semi-parallel processing in C++
Genetic Tetris Graphical Tetris game with an AI developed and optimized through a genetic algorithm

PROGRAMMING COMPETITIONS & EXTRA CURRICULARS

Spring 2016 **DataHack @ UT Austin (Honorable Mention)** — model predicts insurance holder enlistment status w/ 96% acc.
Summer 2015 **Intern Hackathon @ Bloomberg (1st Place)** — Developed 3D CTF game, along with a promotional video
Spring 2015 **Bloomberg Coding Competition @ UT Austin (2nd Place)** — Developed algorithmic stock trading software
2010 - 2014 **Youtube Channel** — Grew "PearSquirrel" to 4,000,000+ views & 10,000+ subscribers through Minecraft inventions
2005 - Present **Trumpet** — University Marching Band 2014-2015, University Jazz Ensemble 2015-2017, Jazz Soloist 2017-Present

SKILLS AND TECHNOLOGY

Proficient Java, Python, C++, Git, Vim, LaTeX
Exposure Ruby, TensorFlow, MATLAB, R, SQL, Scala, JavaScript, C, Objective C, Bash, HTML, CSS, React

RELEVANT COURSEWORK

* denotes honors

Artificial Intelligence*, Data Structures*, Discrete Math*, Computer Architecture*, Operating Systems*, Algorithms*, Programming Languages*, Data Mining*, Computer Vision/Machine Learning*, Network Security, Cloud Computing, Networks, Statistical Modeling*, Mobile Computing, Vector Calculus*, Differential Equations, Linear Algebra, Managerial Accounting, Financial Accounting, Finance