Timothy T. Chen

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EDUCATION

WASHINGTON UNIVERSITY IN ST. LOUIS   **May 2018**

Bachelor of Science in Electrical Engineering (Minor in CS) **|** GPA: 3.51/4.0 (Major GPA: 3.71)

Honors & Awards:

- IEEE-HKN Honor Society | *Induced May 2018*
- Dean's List | *Spring '15, Fall '15, Spring '16, Spring '17, Fall '18*
- Washington University EE Student Advisory Board '16-18 | *One of top 7 top EE students chosen to represent the EE student body at WUSTL*

Relevant Coursework: ,

- Data Structures & Algorithms
- Object-Oriented Software Development
- Web Development & Rapid Prototyping
- Optimization
- Digital Logic & Computer Architecture

WORK & RESEARCH EXPERIENCE

Strayos, Inc.   St. Louis, MO

Software Engineering Intern   May 2018 – August 2018

- Onboarded two major clients by implementing enterprise role-based access control workflow within existing application using Angular2, Ruby on Rails, and PostgreSQL under a strict 1-month window
- Decreased image processing times by up to 15% by redesigning and optimizing frontend components and backend RESTful APIs through chunked transfer encoding of 10,000+ images
- Improved volume measurement accuracy of blasting module by 0.5% modifying 3D burden volume analysis models using OpenLayers, Three.js, and D3.js
- Conducted unit-testing using Postman and Jasmine framework using the Angular CLI

Sondare Acoustics Group, LLC   St. Louis, MO

Electrical Engineering / Circuit Design Intern   May 2017 – March 2018

- Provided acoustic visualization and analysis for our clients and products by building audio waveform and spectrum analyzer with nearly 60fps using Python, SciPy and the Python Matlab library
- Consulted with renowned human echolocationist Daniel Kish and the St. Louis Society of the Blind to design a patent-pending ultrasonic visual assistance device based on user needs, priorities, and accessibility

Center for Sensor Signal and Information Processing   St. Louis, MO

Undergraduate Researcher   August 2016 – May 2017

- Implemented and optimized matrix completion algorithms via MATLAB to reconstruct missing climate data using tree ring data to compare with other methods of climate field reconstructions under Dr. Arye Nehorai
- More details can be found on https://sites.wustl.edu/ese497mc/introduction/

PERSONAL CODING PROJECTS

Blog Application   August 2018

- Constructed a Tumblr-like blog web app from scratch using the MERN stack and Redux state management
- Features include user management (with Google's OAuth API), subscription management, reactive UI, and writing/publishing posts & comments

For other projects & relevant coursework, view on Github @ https://github.com/tch96

- Other projects include a C++ Poker program, Node/Socket.IO bridge app, and more!

SKILLS

Strong: Java, JavaScript, HTML, mySQL, Angular2, PostgreSQL
Proficient: C++, Python, MATLAB, CSS, React, Redux, Ruby on Rails
Others: Git, jQuery, MongoDB, Mongoose, Node.js, Express, Socket.IO, AWS, Azure
Hobbies: Piano, Guitar, Basketball, Tennis, and Card/Board games