Tyler MARKLYN

12733 3rd Ave NW, Seattle WA, 98177 · (206) 422 6452 · tyler@marklyn.com

EDUCATION

MAY 2015	**Harvey Mudd College**, Claremont CA Joint Major in COMPUTER SCIENCE AND MATH, Concentration in LINGUISTICS Dean's List, Final GPA: 3.62/4.00
JUNE 2011	**The Northwest School**, Seattle, WA | Final GPA: 3.96/4.00

WORK EXPERIENCE

JAN 2021-PRESENT

Senior Software Engineer at CONVOY

Work on the scheduling team with a goal of providing a suite of tools that allow Convoy's operations team to schedule shipments efficiently and successfully, with help from automation. The team is currently working on building out a new Temporal+Salesforce based scheduling system that has improved operational efficiency by 41% on our pilot shippers.

Previously, worked on a suite of web scrapers for Transit Management Systems (including developing 2 new scrapers). Onboarded and managed a team of contractors to develop new scrapers. Reduced the time to develop a new scraper down from 16 weeks to 6 weeks by streamlining the development, testing and release process.

MAY 2017-NOV 2020

Software Engineer 2 at MICROSOFT

Continued work on the Intentional Layout Engine after Microsoft acquisition. Expanded the Layout API to better support multithreaded and deferred work across rendering frames, allowing for an increase in performance of a whiteboard with 1000 items on it from 10 fps to 180 fps.

Led team that worked closely with application developers using the framework to improve and refine our published APIs and features to be more ergonomic, allowing for faster development of high-impact applications.

Eventually, transitioned within the Whiteboard team at Microsoft to focus on development of a web-based implementation of the Intentional Programming Platform, with the eventual goal of creating an open-source application development framework.

AUG 2015-MAY 2017

Software Developer & Analyst at INTENTIONAL SOFTWARE

Worked primarily on implementation of an incremental-computation based layout engine. The engine allows application developers on the Intentional Programming platform to use our Layout DSL to create performant applications that can automatically performantly update visuals.

Worked on API to allow application developers to extend the Layout Engine with their own custom visuals and animations, while still automatically providing incremental computation.

TECHNICAL SKILLS

Basic Knowledge:	REACT, TEMPORAL, JAVASCRIPT, ERLANG, SCHEME, UNIX, Mathematica, C, MATLAB
Intermediate Knowledge:	TYPESCRIPT, C#, C++, PYTHON, JAVA, SQL, Excel, LaTeX
Practice in:	Incremental Computation, Web Scraping, Computation Platform Creation & API Design, Distributed Systems, Programming Language Design, Data Structures

NATURAL LANGUAGES

ENGLISH: Fluent	ITALIAN: Fluent	SPANISH: Fully able to converse	FRENCH: Basic Knowledge

INTERESTS AND ACTIVITIES

TECHNICAL: Computation Engines, Data Visualization, Data Structures, Distributed Algorithms, Domain Specific Languages, Programming Language Creation

NON-TECHNICAL: Board Games, Video Games, Linguistics of natural languages and their relation to programming languages, Competitive Magic: the Gathering, Baseball, Football, Juggling, Any Seattle-based sports team