## Ashkan Banitalebi Dehkordi

ashkanb0.github.io E-Mail: ashkan.dant3@gmail.com Cell: (+98) 905-739-2449

## **Educational History**

2015–2018 Ms.C. Computer Science

Stony Brook University, Stony Brook, NY

B.Sc. Computer Engineering ECE Department, University of Tehran, Tehran, Iran

Specialized in Software Architecture

### **Professional History**

#### 1Sell

Software Engineer & Back-end lead NestJS on TypeScript, postgreSQL

2022-2023

As the back-end lead in an e-commerce platform in Qatar, I helped develop and maintain a tool that encompassed a variety of domains required by a dynamic e-commerce environment including a feature-rich catalog, inventory and shipment management systems; and a variety of integrations to third-party platforms.

#### **Hermes Capital**

Software Architect & Full-stack dev Clojure, Clojurescript (re-frame) postgreSQL, mongoDB, Apache Kafka, RabbitMQ

Hermes Capital provides investment solutions. As the technical team in Hermes, we create tools needed by asset managers to navigate a volatile and complex market.

2019-2022

Our financial tool set is comprised of an algorithm trading platform and a plethora of trading algorithms including, but not limited to, Market-Maker, Arbitrage, etc; An algorithm trading system that is real-time, capable of managing a large amount of highly fluctuating, mission-critical load (of billions of IRRs of assets under management), using event sourcing and stream processing to achieve great performance requirements.

To achieve this, we created a mostly-in-memory system with total historical transparency, out-of-the-box scaling capability, relying on practices such as generative testing and Business-Driven-Design to maintain productivity and agility of our development team.

#### Blue Bit Soft

 $\begin{array}{c} \text{Back-end} \\ \textit{Typescript} \end{array}$ 

2019

ApotheekBezorgt is a delivery platform for pharmacies, including a courier app, and a website used by patients to request, track, and receive their medication.

#### Tapsi

Technical TL for Promotion & Back-end dev Node.js, postgreSQL, mongoDB, Redis, RabbitMQ

Tapsi is a ride-hailing app. With a micro-service back-end system managed by multiple teams.

2018-2019

In Promotion team, we created a variety of tools required by the marketing team for promotional campaigns. Tools such as: loyalty (to identify and incentivize loyal customers), "adventures" (to identify and incentivize heavy users), "driver missions" (to engage drivers and increase supply), and a lot of other tools, designed to cover many marketing scenarios; with an engine for constraint-checks (geographical, time, personal data, etc.)

# Selected Projects

2020-2022	Project Van Buren  The extensive technical solution for Hermes Trading including an algorithm trading platform, management software, algorithms, distributed connection platform for sending and receiving data to TSE.  Using Clojure & Clojurescript  Apache Kafka, RabbitMQ, postgreSQL, mongoDB	Hermes Capital
2020	Hyper-Instance Manager High-performance event-sourcing system using means of concurrency provided by Apache Kafka, designed with ease of scaling and high availability in mind.  Using Clojure & Apache Kafka	Hermes Capital
2019	Hermes Component System level dependency validation and higher level component management using component definition and dependency injection of stuartsierra/component  Using Clojure & stuartsierra/component	$Hermes\ Capital$
2018	New Promotion System  New design and implementation for promotion in Tapsi, moving from a monolith architecture to a micro-service.  Creating an abstraction system using a micro-service paradigm to create a robust, highly customizable, extensive marketing tool  Using Node.js, mongoDB & Redis	Tapsi
Summer 2016	MY-SBUOS Lightweight operating system focused on access control, efficient memory management, and O(1) scheduling Using C & Assembly for x86_64	Course project for CSE 506 Operating Systems
Fall 2014	Web data analyzer  Collecting, recognizing and classifying data fields on websites, partitioned by the websites' types.  Developed in Python	Social Networks Lab, UT
Summer 2013	RBPT formal verification for wireless network protocols $Using \ ANTLR \ \mathcal{E} \ JAVA \ for \ ML$	
Fall 2013	MeetMe  Web application to arrenge meetings and assign rooms in a campus  Using Django, PYTHON, HTML, CSS, JS,  postgreSQL & JS (for load-testing)	Course Project for Software Engineering
Summer 2013	Notification Manager (NODAD)  Academic Social Network  J2EE web application using wicket & hibernate over RDBMS	UT Summer of Code
Spring 2013	BookMaina Web portal to buy and sell used books Using Django, Python, mySQL, HTML, CSS, JS	Course Project for System Analysis and Design

## **Areas of Interest**

Software Design & Architecture Network & Destributed Systems Programming Languages Algorithms & Game Theory

## Skills

Programming	Clojure, Clojurescript, Python	Expert
& Software	JAVA, JavaScript, TypeScript, HTML, CSS, SQL, Befunge:)	Experienced
Languages	C/C++, PHP, Bash, Lisp, Clips, ML, MatLab, Octave, Haskell, Scala, C#, R, Ruby, Prolog,	Familiar
	TeX IATeX	

 $T_EX$ ,  $PAT_EX$ 

Tools, Apache Kafka, RabbitMQ, postgreSQL, mongoDB, Node.js

Platforms, Django, NestJS, pedestal, re-frame, & MySQL, Nginx, git, ANTLR, Linux, Methodologies Distributed systems testing (jepsen) Generative testing (test.check)

Language Farsi Native

English
French, Arabic, Gilaki
Elementary