

Bhargav Patel

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EXPERIENCE

UNATA (ACQUIRED BY INSTACART) | BACKEND DEVELOPER

May 2017 – Present | Toronto, ON, Canada

- Scope and Implement an Instacart specific Order Fulfillment System, and writing tools for our QA team to do end-to-end testing for Instacart Fulfillment deliverables
- Maintain previously implemented payment gateway integrations such as: First Data, Authorize.net, BrainTree, etc
- Responsible for migrating 10 TB of remote object/blobs from our then hosting provider's custom storage solution to Google Cloud Storage. Cool features included: Syncing (since both services had to be usable for many releases until a switch was made), Resumability, Restarting, Diff, Syncing, Scheduling, etc.
- Responsible for writing a scheduled utility tools to manage memory of our Redis broker which was getting overwhelmed by a potentially buggy queueing system
- Extend existing queueing solution (RQ) to add requeueing (with/without backoff), monitoring, and a foundation to add additional middleware.
- Backend API related work (vertical slice) for new projects
- Scope/build/integrate with third-party integrations such as Google, Facebook, and Twitter.
- Help w/ Process development such as PR proposal etiquette, leveraging more functionalities provided by our error reporting solution, Sentry.
- Tools development

UNATA | DATA DEVELOPER

May 2015 – August 2016 | Toronto, ON, Canada

- Responsible for scoping and developing the first iteration of a Order Fulfillment system, responsible for creation and fulfillment of more than 3 million orders across multiple partners
- Developed data pipelines for high volume and high availability data transformation
- Improve chain sources, parsers, and consumers to improve throughput and accommodate idiosyncrasies between different ETL processes
- Partner On-boarding support as well as solution design
- Payment integrations (First Data, Authorize.net, BrainTree scoping)
- External integrations with Partner services
- On-call support and client communication
- DevOps (Jenkins, Ansible, etc) and Tools development
- On-site early stage scoping meetings with partners in USA

EDUCATION

CARLETON UNIVERSITY (2012-2017)

B.Eng in Computer Systems Engineering | ON, Canada

- Engineering Project: Systems Architect for the (iTAD Project) • Cum. GPA: B range

ÉTUDES

PROJECTS

TFTP RFC 1350 Protocol Simulator
Indoor Traffic Monitoring System
Raspberry PI + GPIO • Arduino • Serial communication • Homemade sensors • Twilio API
RoboChess chip interface design (school project)
74LS244 buffer • 74LS373 latch • 8253 Programmable timer • 8279 • 8251A • 82C55 PIC • 74LS138 line decoder • 74LS245 transceiver
Lower-level concurrency simulations
FCFS • RR • MLFQ • IPC • Pipes • Queues

TECHNICAL STACK

Programming Languages:
Python • Java • Javascript (w/ Node.js) • C99 • 8086 and HC12 Assembly • Elixir (basics)
Technologies:
SPI/I2C/Serial/CAN • Robot Operating System (ROS) • Arduino/Raspberry (SBCs in general) • PostgreSQL • SQLite3 • Redis & Memcached • Flask framework • Google Cloud Platform • MQTT • WebSockets