MICHAEL PRETTI

SUMMARY

- 20+ years of technical development experience covering a broad spectrum of industries including large financial institutions, major transportation companies and small thriving startups (spectroscopy and closed loop marketing / sales enablement)
- A proven entrepreneur who has consulted for major firms and excels in client facing presentations as well as backroom brainstorming sessions
- Conducts business professionally, energetically and has a real passion for innovative technical solutions

TECHNICAL SKILLS

Development Languages / Tools	Java, Javascript, Ruby on Rails, Python C/C++, SQL, Perl, PHP
Java Technologies	J2EE, Servlets, JUnit, JSPs & JSTL, Hibernate, EJBs, JNDI, JDBC, JAXB, JPA
Web Technologies	jQuery, IndexedDB, HTML5, CSS, Javascript, WebKit, GWT, Node.js
Design/Development	Object oriented design, client/server development, GUI design, iterative development and architecting in a distributed environment, agile methodology, user story boarding

EDUCATION

University of Waterloo   Fall 1994 to April 1999

- Bachelor of Mathematics - Joint Honours Computer Science and Combinatorics & Optimization
- Maintained an over 80% average throughout each term

PATENT

Apparatus and method for optimizing data capture and data correction for spectroscopic analysis

Patent number: 9546904

https://patents.justia.com/inventor/michael-pretti

WORK EXPERIENCE

Newton.co: Staff Software Engineer   March 2021 – Jan 2022

Waterloo, Ontario

- Added more than 40 new cryptocurrencies to existing platform
- Implemented crypto deposit and withdraws using Fireblocks
- Led and grew team of developers
- Technologies: Python, Node, Javascript, Ansible, AWS, SQS, SNS, S3, Terraform, React Native
- Added a common logging infrastructure, including monitoring across all microservices
- Improved KYC process / implementation with Persona

VendorPM: CTO   May 2020 – Nov 2020

Waterloo, Ontario
- Migrated database schema from MongoDB to Postgres
- Managed and contributed to core product development
- Interfaced with investors and executives to secure funding

World Business Executive Coaching Summit: Lead Technical Manager   Nov 2019 – Mar 2020

Waterloo, Ontario
- Lead technical team in completion of sales and marketing funnel tech
- Migrated multiple web apps to a managed hosting provider
- Improved security and development process

Xtreme Blockchain Labs: Senior Software Consultant   Dec 2018 – Feb 2019

Waterloo, Ontario
- Reviewed and assessed high level architecture
- Designed benchmarking process of the core trading / matching engine
- Improved development processes

Technical Environment:
- Google Cloud Platform, AWS
- React, GraphQL, Node.js, ElasticSearch, InfluxDB

Kinetik: Co-founder   Aug 2018 – Mar 2020

Waterloo,, Ontario
- Built MVP demo
- Integrated KIN API with an Android app
- https://medium.com/kinblog/kin-developer-program-use-cases-for-crypto-in-health-and-fitness-d7b14f079327

Coinvest: Full stack developer   Dec 2017 – Apr 2018

Waterloo,, Ontario
- Built MVP demo
- Designed an ERC20 token, and smart contracts to manage
- Championed the adoption of cryptocurrencies

Technical Environment:
- Solidity, remix, truffle, sails, node.js, rails
- AWS

Shopify: Senior Software Engineer   May 2015 – Aug 2017

Waterloo,, Ontario
- Built tool to migrate Amazon webstores to Shopify platform
- Designed and implemented tool to use instagram as a sales prospecting tool to Shopify's team of sales hackers
- Championed the addition of tracking merchant goals with the Shopify Plus Account Centre.
- Used Electron framework to create a GUI for desktop environments (Linux, Win & Mac)
- Integral member of team building Wholesale app

Technical Environment:
- Broad technology stacks used: Ruby on Rails, REST API, Heroku
- Github, Circle CI, kubernetes, Google cloud platform
- Node.js, chromium

Contract Role: Senior Java / FullStack developer

Client: Validus Research Inc: Sept 2014 - May 2015
Waterloo, Ontario
- Maintain and enhance in house built system to price short tailed insurance contracts within the reinsurance domain
- Analyze how to integrate AngularJS into existing JSF / custom java web application
- Design and implement process to add fronting chain as a business model to VCAPS system

Technical Environment:
- Tomcat, custom MVP javascript library, JSF, AngularJS, jQuery

Client: Waudware: February 2014 - July 2014
Waterloo, Ontario
- Porting a 16 bit application to a Java platform.
- Analyze current system with more than 200 screens, and create a UI framework
- Integrate the UI framework with a new backend using Spring and Hibernate.

Technical Environment:
- Java 8, Maven, jetty, RESTful services, UI design, Hibernate, Spring

Skura Corporation: Development Manager and Team Lead   January 2014 – April 2014
Oakville, Ontario
- Leads a team of software developers in developing a platform and applications in the emerging CLM (closed loop marketing) market.
- Broad technology stacks used: Google Web Toolkit, Java, Amazon EC2, iOS Development (C++ and Objective C), Javascript, CSS, Jenkins, MySQL, MSSQLServer, H2, SQLITE, jQuery, Spring, Tomcat

Technical Environment:
- GWT (Google Web Toolkit), Java, ant, javascript, css, sass, MySQL, SQLServer, SQLLite, jQuery
- iOS, Objective C, C++, Jenkins

Ground Floor Trading: Proprietary Trading Firm Owner   March 2013 – present
Waterloo, Ontario
- Built a team to develop short term mean reversion and momentum identifying equity trading strategies
- Backtested strategies using a variety of tools including Matlab, R, Quantopian and Quantconnect

- Designed and implemented a java application that interfaces with the trading platform PPro8. Technologies used: Java, socket requests sending HTTP requests, MySQL, and Google Cloud API
- Working with an executive in residence at Communitech

Technical Environment:

- Java, Matlab, R, Python, FIX protocol, Google Cloud API, Hadoop, NoSQL, Interactive Brokers API, Sterling API, jFreeChart, Xignite API

[P&P Optica](): Software Manager   Nov 2010 - March 2013
Waterloo, Ontario

- Manage team of software developers to create a leading edge platform for spectral analysis
- Implement algorithms to correct distortion, automatically calibrate spectrometers
- Manage the IT infrastructure and operations of a rapidly growing company
- Architected, designed and implemented Iris, a java and c++ software application used to acquire and analyze spectroscopic data. http://www.ppo.ca/technology/ppo-iris-software

Technical Environment:

- Java, Matlab, C++, jFreeChart, Apache Tomcat, PostgreSQL, MariaDB

Swifttrade: Branch Owner & Manager   April 2008 – Nov 2010
Vancouver, British Columbia

- Managed and operated a trading floor of 8 active equity traders.
- Individually responsible for innovating and implementing a custom trading strategy utilizing the NYSE's Arca Auction market feed, which realized over 2 million dollars. Strategy focused only on ETFs.
- Controlled and managed risk of a portfolio of tens of millions of dollars.

Technical Environment:

- Java, Matlab, R, Python, FIX protocol, Google Cloud API, Hadoop, NoSQL, Interactive Brokers API, Sterling API, jFreeChart, Apache Tomcat

[QuoteMedia Inc](): Senior Developer – Team Lead   June 2006 – July 2007
Vancouver, British Columbia

- Created a realtime alert system. Used the open source drools (now JBoss Rules) rules engine to trigger realtime alerts based on UDP and TCP packet based stock market data.
- "Ajax-ified" component based financial web tools, including a symbol lookup to provide immediate results as a user searched for an equity, option, mutual fund or future contract.

- Developed the foreign exchange interface of the Quotestream wireless product.
- Migrated backend apps from EJB 2.1 to EJB3.0 using hibernate entity manager and hibernate annotations.
- Developed key components of QuoteMedia's mobile Quotestream application using Java ME for the Blackberry OS

Technical Environment:

- Java, Drools, JBoss Rules, Java NIO, Javascript, AJAX, GWT (Google Web Toolkit), Java ME , Blackberry OS, Apache Tomcat, WebSphere
- Hibernate, Oracle, linux (redhat) , windows

[Credit Union Central of BC](): Senior Consultant   February 2005 – February 2006
Vancouver, British Columbia

- Transformed online bank services to generic web services using Axis deployed to WebLogic.

- Developed asynchronous SOAP messaging to securely deliver sensitive data between credit unions and members.
- Created customized web forms for Canada's two largest credit unions.
- Implemented site search functionality using open source technologies Nutch and Lucene

Technical Environment:
- WebLogic, Java, Lucene, JBoss, SOAP, XML, JSP, Oracle, MySQL, Apache Tomcat

SWIFT TRADE INC: PROPRIETARY TRADER / SOFTWARE CONSULTANT   June 2004 – February 2005

Vancouver, British Columbia

- Designed and implemented a customized NYSE market scanner to discover hidden pools of liquidity
- Custom designed an application to monitor worldwide trading trends within Swift Trade Inc. Implemented using Java (Swing) , TCP/IP, UDP and a multi-threaded gui application
- Implemented a risk monitoring system allowing managers to set alerts and automatic liquidation levels

Technical Environment:
- Java, Matlab, R, Python, FIX protocol, Google Cloud API, Hadoop, NoSQL, Interactive Brokers API, Sterling API, jFreeChart, Apache Tomcat

IBM: e-Business Software Engineer   July 1999 – March 2004

Burnaby, British Columbia

- Team Development Lead for Trade Innovator for Sales and Client. Current clients of Trade Innovator include TD Waterhouse, Dundee Securities, Laurentien Bank, Penson, NBCN and Western Financial Group
- Investor Relations redesign of http://www.ibm.com/investor (PERL & PHP)
- Involved in implementation of Interwoven's content management system for British Airways (London, England). All content and extranets deployed to a WebLogic cluster running on Solaris.
- Designed programming model of a framework targeted at the travel industry. Architecture composed of servlets and EJBs. Used XML messages over HTTP to interact with services.
- Implemented a basic SOAP server
- Prototyped a multimedia content repository using JSPs, servlets, WebSphere and DB2
- Reviewed content management tools for a start up internet company

Technical Environment:
- Java, Apache Tomcat, WebSphere, WSAD, JSP, Servlet API, DB2, Interwoven TeamSite, perl, EJB, XML, HTTP, SOAP, HTML

REFERENCES

References available upon request