

Colin Blower
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Technical Experience:

- Programmed in Python, C#, Typescript, Scala, Java, Haskell, Bash, C/C++, Scheme
- Completed projects using ChatGPT, Pinecone, Spark, Cassandra, Kafka, Hadoop, Docker
- Worked significantly with Machine Learning and Natural Language Processing
- Implemented efficient algorithms for working with large distributed datasets
- Architected a solution for learning and deploying ML models, including data transformations

Work Experience:

Tonic.AI, 548 Market Street, San Francisco, CA 94104

Senior Software Engineer (October 2022 - July 2023)

- Implemented prototype conversational agent for answering questions regarding our product, backed by product documentation, ChatGPT, and Pinecone
- Lead developer on design and implementation of extensible encryption feature
- Identified and implemented various improvements to CI/CD which improved feature turnaround time and reduced resource usage
- Fixed various performance issues from frontend Typescript to SQL queries
- Lead developer on design and implementation of product api versioning

Promenade Software, 16 Technology Drive, Suite 100, Irvine, CA 92618

Principal Engineer (March 2020 - January 2021)

- Led requirement gathering and development of enterprise covid-19 test report platform
- Responsible for HIPAA compliant multi-tenant database system development and maintenance
- Oversaw knowledge transfer of acquired ML product
- Involved in hiring and project resource planning

Infosys Limited, 6100 Tennyson Parkway, Suite 200, Plano, TX 75024

Product Technical Architect - Advanced AI Platforms (March 2017 - March 2020)

- Designed machine learning deployment pipeline which utilizes Spark Streaming
- Architected solution for learning and deploying arbitrary data transformation for ML
- Researched productization of advanced NLP techniques, including word embeddings
- Oversaw workload and personal development of several junior team members
- Led development of several key projects in Java, Scala, and Python
- Spearheaded effort to dockerize our software platform for deployment on kubernetes
- Established technical leadership in promoting communication between three technical teams and their Javascript, Java/Scala/Python, and C++ codebases
- Demonstrated use and value of advanced unit testing to ensure software quality

Skytree Inc, 1731 Technology Drive, Suite 700, San Jose, CA 95110

Senior Software Engineer (June 2014 - March 2017)

- Investigated integration of Tensorflow into the core product
- Conducted research on advancements in neural networks, deep learning, and NLP

- Designed and engineered an advanced system for automating creation of reusable data engineering pipelines for machine learning
- As part of the hiring pipeline, I created an optimized system for testing and verifying candidate code tests
- Collaborated with core Spark developers to diagnose a tricky bug involving the Scala compiler (SPARK-3266 & SI-8905)
- Developed a key product feature under a very tight deadline to unblock a major sales opportunity
- Adapted several specialized NLP algorithms for use on Spark

Barracuda Networks, 3175 Winchester Blvd, Campbell, CA 95008

Software Engineer (May 2012 - June 2014)

- Created a naive bayes classifier for pornographic domain names (Java)
- Developed a Java service providing information for >140 million domains with <10ms latency and capable of >20,000 requests per second on a single server
- Updated Kafka Perl driver to work with the 0.8 protocol
- Authored CQL3 support for Perlcassa (a popular Perl driver for Cassandra)
- Debugged issue with interaction of Perlcassa and Thrift involving buggy external code and Perl's implementation of UTF8 strings
- Led effort to obtain valuable third party data (TLD zone files)
- Maintained and updated machine learning based classifiers
- Became team resource for machine learning related issues
- Wrote RabbitMQ Perl tutorials and deployed a RabbitMQ system
- Developed solution for classifying similar images with perceptual hashes
- Motivated replacement of SVN with GIT

NetApp, 495 East Java Drive, Sunnyvale, CA 94089

Intern (May - September 2011)

- Developed a C/C++ kernel level solution to add flexibility and optimize the speed of data backups

Intern (May - September 2010)

- Worked on a project to enable multithreading in a core C application

SJSU, College of Engineering, One Washington Square, San Jose, CA 95192

Linux Sysadmin Student Assistant (August 2009 - May 2012)

- In charge of uptime, performance, and backup of all Linux computers run by the SJSU College of Engineering, including production, development, and lab setups.
- Created web interface to manage errant processes on 100+ linux machines

Education:

San Jose State University GPA: 3.34 Major GPA: 3.49

Computer Science & Minor Mathematics (August 2008 - December 2012)

- Competed on San Jose State's 2009 & 2010 ACM ICPC (Programming Contest) teams
- Organized and led San Jose State's 2012 ACM ICPC team
- Won first place in software security competition held on campus
- Coursework in probability theory, statistics, linear algebra, security, and optimization