Michael R. Jacobi

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Work Experience

Senior Software Engineer - Backend Web Services Team *Spring 2015-present*

Linden Research, Inc *Seattle, WA*

- Designing and coding payments, authorization, accounts, and PII microservices
- Facilitating cross-team conversations to engineer solutions for subscriptions, financial reporting, payments unification, data warehouse clients
- Communicating with payments vendors for integration purposes
- Practicing modern software engineering: containers, CD, kanban, BDD
- Using: go, python, docker, AWS, mysql, redis, jenkins, javascript, oauth2, git, protobuf

Software Engineer - Payments Team *Summer 2013-Spring 2015*

Linden Research, Inc *Seattle, WA*

- Developed backend invoicing/payments services
- Coded credit card/PII add forms using Angular with 400,000+ successful submissions
- Led invoicing/payments production deploys and first responder to billing outages
- Used: django, apache, mysql, mercurial, debian packages, teamcity, rabbitMQ

Post MS for HPC Team *Summer 2010/11/12, Fall 2011, Spring 2013*

Los Alamos National Laboratory *Los Alamos, NM*

- Created MongoFS: MongoDB backed FUSE file system with searchable metadata
- Implemented MongoFS CLI in C to tag and recall file system records
- Stored file system tags in sharded MongoDB cluster at 100 million record scale

Teaching Assistant *Spring 2012*

University of New Mexico *Albuquerque, New Mexico*

- Developed competetive multiplayer, command line, cybersecurity game in Python
- Co-authored “Students who don’t Learn Cybersecurity should be Eaten”, CSET ‘12

Various Student Jobs *Fall 2009 – Spring 2011*

University of Montana *Missoula, Montana*

- Wrote natural language processing program using SVMs to classify audio recordings
- Developed Windows UI using wxPython for ecological modeling program
- Created remote controlled car with Arduino and XBee chips

Education

Master of Science in Computer Science	*University of New Mexico*	*12/2012*
Bachelor of Science in Computer Science **Minor in Mathematics**	*University of Montana*	*05/2011*

Side Projects

Personal CD Pipeline *2017*

- Built a PoC in which a browser client and an app server use the same protocol buffer files
- Used AWS Code Pipeline/Build/Deploy to autodeploy on github master pushes

Poker App *2016*

- Created a websocket based, multiplayer poker game in React/Redux and Go
- Wrote automated UX tests using Selenium and webdriverio

Assorted Machine Learning work *2015/2016*

- Completed Andrew Ng's online Machine Learning class
- Acheived 80% accuracy on classifying Kaggle's Titanic dataset
- Experimented with Stanford's sentiment analysis algorithms

Wallpaper App *2015*

- Wrote API and frontend to submit background image links and tags
- Created Windows Go client to query image data from Wallpaper API and periodically cycle desktop background according desired tags

Pong App *2014*

- Python Bottle REST API to create ping pong games and submit scores, backed by MongoDB
- Created Android app to integrate against Pong API
- Wrote an Angular webapp to visualize ping pong data with Chart.js
- Recorded ~400 games of ping pong with this app

YouTube Music Project *2013*

- Developed web app to create video playlists using Angular, Bottle, and MySQL
- Integrated SoundCloud and YouTube media into unified, looping playlists
- Created RESTful interface to add/remove media from playlists

Amazon AWS Projects *2013*

- Experimented with S3, Dynamo, and AWS Javascript SDK to create web app (Item Generator)
- Hosted an EC2 web server using CherryPy and Python AWS SDK (Throttler)
- Configured cluster load balancing, auto-scale rules, and IAM policy/users

Student Game Project *2011*

- Conceived, designed, and documented educational game using C#/XNA/3DS Max (team of 3)
- Implemented game object behavior, collision detection and rewards/power-up system