Alexander Pierce Jansen

xanderjanz@gmail.com

alexpjansen.com

5 years of software experience. Most recently a Senior Software Engineer (L5a) at Uber. Where I did mobile and web app development within a microservice infrastructure. I love building magic for the masses, mixing many technologies. **Javascript, Python, and SQL are my core software languages**. Web clients are my specialty, but I'm a generalist engineer. I've done some devops, applied machine learning, and I spoke twice at Uber All Hands about hackathon projects. Outside work I've done a bit of VR and robotics. I enjoy learning new technical things of all sorts. I'm very lucky to have worked at fast growing companies very large and very small, and enjoyed both. I'm effective in coordinating with small fast acting groups of engineers (2-10) to build production systems. Outside of work I like to drive my Miata, play *Magic: The Gathering*, skateboard, go to shows, and draw.

Work Experience

Fullstack Senior Software Engineer L5a - Uber (Sep 2018 - October 2019 at this level)
Fullstack Software Engineer L4 - Uber (Sep 2016 - Sep 2018 at this level)
Junior Web Engineer - Plangrid (Dec 2014 - Aug 2016)
Junior Web Engineer - Showvine (May 2014 - Aug 2014)
Founder - Open Robotics (June 2013 - April 2014)
IT and Fulfillment and Product Management - iFixit (Feb 2010 - Dec 2012)

Certificates

Eagle Scout - **Boy Scouts** (2009) High School Graduation (Emphasis on STEM) - **Monte Vista** (2009) 3 semesters, no degree - **Cuesta College** (2011) Machine Learning 10 week online course by Andrew Ng - **Coursera** (2014)

References

Haim Tebeka (Uber Manager) haim@uber.com Ralph Goatee (PlanGrid Founder) ralph@plangrid.com Luke Soules (iFixit Founder) luke@ifixit.com

Example Projects

- "DocApprover" React/NodeJS internal app at Uber. Internal UI for validating more than 250,000 driver documents per day. Second most used web app @Uber
- Driver Mobile App WebViews for Driver Onboarding Compliance + Growth @Uber
- Background Check and Vehicle Inspection Internal Tools @Uber
- Employee Glossary and Community apps, using MySQL and File Storage systems @Uber
- "Field Reports" document management app @Plangrid
- Facebook ad campaign management tools @Showvine

Alex Jansen Computer Vision, AI, and Machine Learning Projects

- Machine Learning Coursera/Stanford Graduated 2014
 - https://www.coursera.org/learn/machine-learning
 - 11 week ~4 hr/week online course. Videos, coding assignments, and tests
 - Python, Octave, SVM, Neural Networks, PCA, distributed learning techniques
 - AI Theory, Logistic Regression, Gaussian Distribution, Linear Algebra
- Blueprint OCR/UDOR Plangrid Contributor 2015
 - OCR of blueprint names on user upload with user defined text box formats
 - Python OpenCV and React
- **uRobot Uber** Hackathon Team Lead 2016
 - OCR of Driver Documents, with human drawn boxes
 - Python OpenCV and Tesseract for OCR and Tensorflow for NLP
 - React NodeJS for human operator UI
 - Uber Hackathon 2, group winner, 3rd place company wide, 1 week Workation
- Instant Document Feedback Uber Design and Eng Lead 2017
 - Real time Cloud OCR, NN, Computer Vision and NLP on Driver Documents
 - Semantic feedback to drivers on ~100k images per day, 400ms-15s SLA
 - "Human in the loop" interactive user feedback
 - Lifted Driver 14d conversion rate 11% globally
 - Python, Tensorflow, proprietary Uber Al Platform, Google Vision, React
- Michelangelo Uber Minor Contributor 2017
 - <u>https://eng.uber.com/michelangelo/</u>
 - UI Platform for analyzing AI training results, used by multiple teams at Uber
- **AVS Lite Uber** Minor Contributor 2018
 - https://eng.uber.com/avs-autonomous-vehicle-visualization/
 - UI for Autonomous Vehicle Logs, simulator, and teleoperation
 - 3D modelling, camera streams, graphs, and settings and utility UI
- Bitcoin Oracle Solo 2016
 - <u>https://github.com/lutherism/bitcoin_oracle</u>
 - Fintech asset price predictor
 - 2GB of CSV Stock price training data, Octave Neural Nets and trained models
- Q-learning Snake Player Solo 2018
 - <u>https://github.com/lutherism/qlearn</u>
 - Q-learning in Javascript, learns to play "Snake" well
- RC Car Al Solo 2019
 - <u>https://github.com/lutherism/car</u>
 - RaspberryPi 16" wifi 12V/5V laser cut RC car, geared motors and hobby servos
 - Python, NodeJS, Linux, ROS, OpenCV, TensorFlow, React
 - Classify objects from USB webcam with open source models, plan motion
 - User control with Web UI and JS-like command language