Sean Konz

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Ambitious and collaborative engineer with a background in **computer systems, digital design**, and **AI/ML** seeking software engineering positions at dynamic companies tackling difficult problems through technology.
Key Skills: Embedded Systems, AI/ML, Backend Web, Digital Hardware Design, DevOps, API development
Technologies: C, Python, C++, Javascript, Node.js, Git, AWS, Verilog, Cuda, OpenCV, Circuit design, PyTorch

Education

Stanford University, Stanford, CA

M.S. in Computer Science, *Artificial Intelligence*, GPA 3.70 **June 2021**
B.S. in Electrical Engineering, *Hardware/Software*, GPA 3.56 *June 2020*
Activities and Awards: CS 106 Section Leader, Theatre Dept. Associate Technical Director, Durand RCC, Coca-Cola Scholar, Ram's Head Theatrical, TreeHacks Category winner, Stanford LITES Video Wall Technician

Industry Experience

Zoox |Software Engineer|Foster City, CA *June 2021 – Present*
- Designed and developed lane divergence monitor for simulation runs with invariance to road surface type
- Contributed to the Reinforcement Learning team as a simulation engineer

Udelv |Software Engineering Intern |Burlingame, CA *March 2021 – June 2021*
- Developed teleoperation console streaming console that reduced data transmission requirements by 95%
- Designed and built fleet operations simulation editor using React and flask

Ideas42 | *Vergil: Lead Developer* | New York, NY *Sept 2019 – May 2021*
- Architected and Developed a behavioral science backed mobile application to improve resource utilization and reduce recidivism rates for community supervision populations
- Integrated Vergil app with a large, government case management system in collaboration with government IT

Stanford University | *CS 107E/107 Course Assistant* | Stanford, CA *Dec 2019 – June 2021*
- Taught analog circuits and bare metal systems programing on a Raspberry Pi 1A to over 120 students
- Collaborated with co-instructors to design and implement new course infrastructure and Hardware-In-the-Loop Testing processes using Python, C, and git which halved course administration and grading time

Cisco | *Software Engineering Intern* | San Jose, CA *June 2020 – Sept 2020*
- Evaluated new Traffic Generator efficacy for switch and router validation through full system tests
- Tested and verified performance of time synchronization hardware on Cisco switches and routers

Invicted | *Co-Founder + Chief Product Officer* | Stanford, CA *March 2018 – March 2020*
- Designed and Built an app to improve the prisoner reentry process by facilitating community connection
- Filed two provisional patents, raised over $100k, hired and collaborated with a team of two engineers
- Supporters: 8VC, Lightspeed Ventures Fellowship, StartX Student in Residence, Dorm Room Fund

Nvidia Corporation | *AV Simulation Software Intern* | Santa Clara, CA *June 2018 – Sept 2018*
- Built a remote integration system for the AV simulator and drive stack in C++ with < 50ms latency
- Prototyped simulation cluster using Kubernetes and multi-sensor data streaming in Cuda and C++

Projects

EE 125 Anniversary Sculpture – Interactive Art project for the Stanford EE department *Sept 2019*
- Designed sculpture lighting effects and mechanical control using CircuitPy and feather boards
- Used CAD for structure design and laser cut hundreds of different sculpture shapes

Wint-e the Battle Bot – Stanford ME 210 final project *March 2019*
- Built a custom, Arduino driven, battery powered, battle bot that shot balls to knock down towers
- Advanced to the semifinal round of the battle tournament against 40 other student teams

Sign Language Translator – Stanford CS 231N final project *June 2018*
- Built and trained a CNN to translate videos of signed words to plain English using PyTorch with 70% accuracy

Other Experience

Patents: EEG-Eye Tracking (application us15268543), ML Impairment detection (application 62/733,236), Mobile Device Impairment Detection (application 62/733,230)
Interests: Rock Climbing, Theatre Tech, Hiking, Video Games, Lacrosse, Breaking (and sometimes fixing) stuff