Nick McCrea

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SUMMARY

Versatile software engineer and demonstrated leader with a diverse 10+ year background, centered around entrepreneurial web application development. I like solving problems that have never been solved before. My work is grounded in rigor and first principles, and the lifelong practices of research, reduction, design, prototyping, implementation, testing, and iteration. I take pride in solving novel problems fast and effectively, and delivering tractable systems that work the way they're supposed to.

PROFESSIONAL EXPERIENCE

Engineering Consultant @ Deepblocks

Miami, FL // Nov 2020 - Mar 2021

• Delivered several critical GIS capabilities to the Deepblocks platform.

Lead Engineer @ Deepblocks

Miami, FL // Apr 2018 - Sep 2019

- Owned the design and architecture of the entire software stack.
- Managed daily engineering operations, including project planning, software design, code review and approval, integration and acceptance testing, deployments, training, and mentorship.
- Collaborated with the engineering team to quickly break down complicated problems, explore the available solutions, and develop action plans.
- Communicated technical risk to the CEO in order to reach consensus on engineering strategy decisions.
- Wrote and maintained comprehensive engineering guidelines and technical documentation.
- Maintained a lean engineering operation with low-cost tools and services.

CTO @ Deepblocks

Miami, FL // Sep 2017 - Apr 2018

- Took over responsibility for all engineering from outgoing technical leadership.
- Built an MVP that garnered a 50% boost in seed funding from investors.
- Made the executive decision to relieve an underperforming contractor.
- Led screening, interviewing, and hiring decisions to build a small, elite engineering team.
- Established a culture of high technical standards and security-first thinking throughout the company.
- Sought and identified a qualified successor for executive role in order to focus on operations and coding.

Technical Editor @ Toptal

Remote // Aug 2014 - Jun 2016

- Authored popular articles on fundamentals of machine learning and mobile robotics control theory.
- Took over all content responsibilities from outgoing editor, including author sourcing, topic brainstorming and curation, draft reviews and guidance, copy editing, technical illustration direction, SEO configuration, and publication.
- Delivered dozens of lucid, technically precise, and evergreen articles on a wide range of topics including fluid dynamics simulation, Linux namespace isolation, and advanced programming design patterns.
- Identified talented authors to join the editing team.
- Grew publication output 4x.
- Grew website traffic 10x.

Software Engineer @ PVPower

Chicago, IL // Feb 2011 - Jan 2013

- Built and shipped a home solar power modeling and optimization tool using Ruby on Rails.
- Corresponded with Argonne National Laboratory scientists to develop a high-fidelity solar insolation model.
- Contributed to business and technical strategy decisions.

Software Engineer Intern @ Pathfinder Software

Chicago, IL // Oct 2010 - Jan 2011

• Learned lean web development, small teams, sprints, test-driven development, and other agile development methods.

Software Test Engineer @ TZ, Inc

Chicago, IL // Sep 2010 - Oct 2010

- Performed end-to-end system testing of control software for remote-operated storage locks.
- Identified and documented errors and wrote recommendations for correcting them.

EDUCATION

Bachelor of Science (BS), Computer Engineering @ University of Florida

2010

CERTIFICATIONS

Machine Learning @ Stanford University (via Coursera)	2013
Cryptography I @ Stanford University (via Coursera)	2013
Control of Mobile Robots @ Georgia Institute of Technology (via Coursera)	2013

PROJECTS & PUBLICATIONS

Sobot Rimulator

Mobile robot simulation and control project demonstrating hybrid automata control theory. Open source. Python.

An Introductory Robot Programming Tutorial

Popular robotics article supplementing Sobot Rimulator.

An Introduction to Machine Learning

Popular ML article describing linear and logistic regression with gradient descent.

Recursor

A fun tree fractal creator. Open source. React, TypeScript, Nodes