

COREY M. BOTHWELL

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SUMMARY

Senior full-stack engineer with 5+ years of experience in building SaaS products from launch to exit. Educated in the USA and Switzerland with strong CS fundamentals & research skills. TypeScript expert. Expertise in graphics & blockchain.

RELEVANT TECHNICAL SKILLS

Front-End: TypeScript, React, Redux, Next.js, HTML/CSS, OpenGL, WebGL, \LaTeX

Back-End: TypeScript, Node, Python, Django, Java, Java Spring, Julia, Rust, C/C++, Solidity, SQL

Operations: Manual Server Admin, Bash, Docker, Distributed Systems, CI/CD, AWS

EDUCATION

ETH Zurich 2023 — 2024
Master's Thesis Computer Science Zurich, CH

University of Zurich 2020 — 2024
M.Sc. Computer Science, Magna Cum Laude — GPA 5.4/6.0 Zurich, CH

University of Virginia 2013 — 2017
B.A. Economics with Distinction — GPA 3.7/4.0 Charlottesville, VA

COMMERCIAL EXPERIENCE

For One Red 2021 — Present
Senior Software Engineer Zurich, CH

- Led development of a visual infrastructure application used to design & test cloud infrastructure with a real-time canvas element. Product used to successfully secure Series D financing round valued at \$45mm
- Used WebGL to provide an intuitive real-time sandbox for quickly creating, testing, and simulating cyber attacks on live cloud infrastructure. Ensured 60 FPS performance at all times
- Integrated reactive front-end components and overlays using React & TypeScript
- Supported collaborative real-time editing with CRDT's (Y.js)
- Researched NP-Hard graph layout algorithms and their optimizations to optimally display thousands of network elements
- Oversaw all data migrations in both development and production using PostgreSQL and Sqitch
- Used GitHub actions for CI/CD and Kubernetes for deployment into on-premise environments
- Re-architected front-end build infrastructure to reduce build times by over 50%, optimized DX
- Top-performer, promoted to senior software engineer within one year after demonstrating technical maturity

AvHopper Aviation Services LTD. 2020 — 2021
Founder Gibraltar

- Implemented a complete SaaS product suite for querying aerospace fuel prices as solo founder
- Built a novel pricing engine in Python that queried multiple petroleum providers to find lowest fuel price while incorporating optimal commission margin
- Implemented in-house accounting system and PDF generator to track customer credit balances and send invoices
- Acquired over 70 customers with an average recurring transaction size of over \$2000. Successful exit to industry buyer

Freelance Developer 2020 — Present
Various Various

- Built in-house customer notification engine for health & beauty storefront using WhatsApp Business Platform API's
- Led back-end development of server API's (Java Spring) for virtual wardrobe application on mobile

RESEARCH & OPEN SOURCE

Browserbook: A decentralized cryptocurrency exchange platform bothwell.org/browserbook

Blockchain Auth: Blockchain-based authentication methods for the web bothwell.org/crypto-auth

Rush: An open source double-entry accounting system written in Rust *Under active development*

OTHER SKILLS & INTERESTS

Foreign Languages: German, Swiss German, French, Spanish

Non-Technical Interests: Aviation, Running, Tennis, Chess, Reading, Travel