

Henrico White

Solidity / Web3 developer

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South Africa (GMT+2:00)

Profile

I am a qualified mechanical engineer. However, as a self-taught developer since 2016, I have learned a range of languages (LAMP stack to C# and counting...). Over the past year I have built experience deploying Solidity projects. I write truffle tests, use Slither, have completed Ethernaut (CTFs) 1-11 and am a 5kyu on codewars in JS. Furthermore, I'm familiar with common smart contract vulnerabilities and view smart contract security as very important.

Lastly, I have CEX transactions dating back to 2017, was a BitConnect user (more on that below) and have >700 transactions on Ethereum.

Skills

React TypeScript CSS3
Solidity Truffle HTML5
Truffle-tests Ganache cli
Open Zeppelin Mongo DB
Web3 Redux Node
Express Slither Docker
Python C#

Education

BEng(Mech) Engineering

Stellenbosch University, 2011

Four-year degree in mechanical engineering (meets Washington Accord standards)

MScEng coursework

Note: No degree

University of Cape Town (2014-15)

Computational Mechanics (Tensor Algebra & Continuum Mechanics) coursework on using programming to solve non-linear finite element problems

Projects

Blockchain Store (Rinkeby)

Solidity 0.8, Truffle, Open Zeppelin, React, Web3, Firebase, Infura

Users purchase items with USDC and receive NFTs (viewable on [testnets.Opensea.io](https://testnets.opensea.io)) representing the product.

- Github: updates to the main branch trigger a Netlify build and updates to [/contracts] trigger an Action running truffle tests
- New products can only be added via the admin page which requires the contract admin signature, verified by the server

blockstore.netlify.app

github.com/HenricoW/block-store

Decentralized Exchange (Rinkeby)

Solidity 0.6, Truffle (tests), Open Zeppelin, React, Web3, Infura

An order book DEX for ERC20s.

- Limit and market trades are available, with order matching done by the smart contract
- A graph shows live price updates using blockchain events

obdex.netlify.app/

github.com/HenricoW/DExchange

Crypto Service site [2017]

Angular 4 (migrated to v12 this year), Firebase, coinmarketcap.com API

A web app to simplify interactions with a popular project of 2017. Unfortunately, this project turned out to be nefarious. This site never had active users, but feel free to try it out with fake credentials.

awesome-app-2617f.web.app/

github.com/HenricoW/awmpj-1

Notable achievements

- **Golden Key** member, Stellenbosch University chapter
- Obtained **SAIMechE** medals for best thesis presentation and joint-highest thesis mark (2011)

Other projects

Staking dApp (work-in-prog.)

Solidity 0.8, React (TypeScript), Web3

A contract for emission of one ERC20 by staking another. Fair rewards calculations are non-trivial.

Github: [HenricoW/stakerLP](#)

Compound Flashloans

Solidity 0.5, Money Legos SDK, Ganache

Contracts for deposits and withdrawals from Compound using Flash loans. Tested with a Mainnet fork.

Github: [HenricoW/YF-Comp-flash](#)

Multi-Signature Wallet (Rinkeby)

Solidity 0.6, React, Web3

A tool for creating multi-signature wallets to fund and send Eth.

Github: [HenricoW/MultiSig_Wallet](#)

References

Mr. Tomislav Radulovic

Senior Design Engineer

Relation: Former superior at Fermel

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Email: tomislav.radulovic@ncm.co.za

Prof. Daya Reddy

Head of CERECAM at the University of Cape Town

Relation: Study supervisor during MScEng studies

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Email: daya.reddy@uct.ac.za

Experience

Design Engineer

Fermel ([fermel.co.za](#)) - 2018-2021(Feb)

Worked in small teams to execute design projects in manufacturing underground mining vehicles.

- Worked on developing the company's first electric utility vehicle for underground
- Wrote a VBA macro in SolidWorks that helps speed up drawing compilation from 1-3 days to 2-3 hours

Junior Design Engineer

Hensoldt Optronics (Irene office) - 2017

Fulfilled an analytical and simulation role in the design of military camera gimbals.

- Developed design of prism assembly for IR/visible light splitter.
- Improved the accuracy of the center of mass measuring machine by approx 30% through testing and calculations

Junior Associate

Boston Consulting Group (Johannesburg office) - 2016

Worked in multi-national teams to provide solutions to listed companies in South Africa.

- Helped identify > R4 million worth of cost savings for a coal mining client (> R80 m team total)
- Contributed to a strategy to streamline people operations and communications for a large multi-national bank

Design Consultant

CAV Cape Town ([cav.co.za](#)) - 2015 (3 months)

Consulted on high failure rate of hub-axles of replica Ford GT-40s for CAV in Cape Town.

- Managed the end-to-end process of the project from requirements gathering and simulations to final report
- Achieved a reduction in failure rate of approximately 60%

Junior Engineer

GRW ([grw.co.za](#)) - 2012-2013

Worked in the testing and verification (PV&V) wing of the design department.

- Led chassis testing project covering >12 000 km (>7 000 miles) to improve chassis design life by >30%