



# **Predictive Markets: A Software Security Application**

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# Motivation

Introduction

Architecture

Experiment  
Setup

Conclusions

*Talk is cheap. Show me the code.*  
– Linus Torvalds, 2000

# Introduction

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# Background: Predictive Markets

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# Architecture

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# Architecture

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- Ethereum and smart contracts
- Augur's prediction market framework
- Marketplace frontend



ethereum



Augur (REP)



# Experiment Setup

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# Experimental Setup

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- GENI testbed
- Augur Tool set for automatic market deployment
- Augur APIs to link the market to the frontend
- Naïve trading bots





## Conclusions

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# Conclusions

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- Extend Augur's predictive market framework
- Metric for software security
- Feedback between software security and company performance
- *Emphasis on secure code*

