Bede Kelly | github.com/bedekelly | contact@bede.io | https://bede.io

I'm a full-stack developer and solutions architect with a talent for jumping onto projects quickly and delivering results. I work well with tight deadlines.

With deep understanding of design patterns and language-specific programming idioms, I'm able to design and implement high quality solutions for a broad range of business domains. I have real-world experience with cloud architecture and solutions design with a breadth of cutting-edge and established platforms and frameworks.

When working in a team, I'm unfailingly warm and friendly, intuitive and skilled at negotiation and conflict resolution under pressure.

Technical Skills:

- **Languages**: Python (deep language knowledge), JavaScript/Node (including ES6), Scala, Java, C (including C99), Processing, Haskell, Elm, C++, OCaml (and Spanish!)
- **Cloud**: Amazon Web Services (EC2, ECS, API Gateway, Elasticache, Lambda), GCP, Firebase
- **Workflow**: Git, Git Flow, Trello, Asana, Jira, Slack, Confluence
- **Packaging**: Docker, Scala Build Tool (SBT), Maven, NPM, Yarn, PyPI, Distutils, Brew, RPM
- **Data**: Redis, ElasticSearch, Consul, PostgreSQL, MySQL, SQLite, Apache Kafka, Django ORM
- **Web**: React, Flask, Django, Pyramid, Finagle, Express, Socket.IO, Server-Sent Events, HTTP4s
- **Environment**: Windows, Linux (Ubuntu, Debian, Alpine), MacOS/OSX
- **Methodology**: Test-Driven Development (TDD), Unit/Functional/Integration/Load Testing
- **Editors**: JetBrains (IntelliJ, CLion, PyCharm, WebStorm), Emacs, VI/Vim, Sublime Text, Atom
- **Design**: Adobe Photoshop, Adobe Illustrator, CodePen
- **Team**: Agile, Scrum, Kanban, User Stories, Mentoring, Client Relations
- **Other**: Proofreader, copywriter, advanced music and audio production

Education:

University of Birmingham - B.Sc. Computer Science with Industrial Year (Pred. 1st) (2015-2019)
Modules include:
- Data Structures & Algorithms
- Elements of Functional Computing
- Computer Systems & Architecture
- Computer Security
- Artificial Intelligence
- Nature Inspired Search & Optimisation
- Intelligent Data Analysis

Awarded a highly competitive scholarship from the Royal Television Society and took part in a range of TV-related events and workshops.

Southend High School for Boys:
- A Level: AAA (Physics, Maths and Computing)
- AS Level: AAAA
- GCSE: 10 x A*

Work Experience:

Contract React Developer at Accenture for E.ON (March 2018 – September 2018)

Delivered a key online sign-up experience driving tens of thousands of pounds worth of customer acquisitions over just the first month. Worked in a collaborative client-facing role, with fast-changing requirements and a fluid job role that led to leading meetings, communicating directly with stakeholders and coordinating project design processes.
- Performant frontend in React/Webpack; quality assessment with Lighthouse
- Third-party integration with SalesForce, Adobe Experience Manager and Bit2Win
- A and AA-rated accessible web design; screen reader software (JAWS); Pa11y CI

Full-Stack Software Engineer at Vanti (January 2018 - February 2018)

Developed a luxury hotel experience for a high-profile British sports team. Helped scale a team from 2 to 5 people, driving change towards Agile/Kanban and more collaborative development with daily standups, team planning and sprint retrospectives.
- Hardware-interaction microservices using Node, Java and Python
- Container orchestration with Docker + Kubernetes
- Remote Procedure Calls (RPC) and data serialisation with Apache Thrift
- Stream processing with Kafka
- Integration with proprietary AV systems including AMX and Lutron

Contract Software Developer at Abide Financial (August 2017 - January 2018):

Solely responsible for successfully delivering business-critical data transformations in time for a pressing regulatory deadline.
- Complex data manipulation for regulatory requirements: MIFID 1 compliance for AFM
- Rapid prototyping and tight client feedback loop
- Python, Flask, XML validation & schemas
- Worked remotely and part-time outside 9-5 due to other responsibilities

Software Engineer at ITV (June 2017 - December 2017):

Enabled personalised user recommendations for the iOS app, a key business deliverable for the quarter. Also designed and built an internal content management tool for all ITV Hub images.
- Strongly typed functional programming with Scala
- Continuous integration/deployment with Jenkins, Puppet, Terraform
- Microservice architecture with EC2, Lambda, S3, DynamoDB, ElastiCache, Kong, Nginx
- Highly scalable: 7k requests per second for peak traffic during *"Love Island"* and *"I'm a Celeb..."*
- Agile environment, kanban and team planning
- Thoroughly tested (unit, functional, integration, smoke, regular load, peak load)

Software Developer Intern at MyOptique (June 2016 - September 2016):

Created a complex online retail promotions system.
- Python, Django and Django ORM, AngularJS, ElasticSearch and PostgreSQL
- Worked with internal clients to iterate from an MVP to a finished product
- Agile approach yielded a valuable & successful feasibility study

Awards & Responsibilities:

Python Workshop Leader
Led a series of Python tutorials for the University of Birmingham, covering intermediate language features, web applications and an introduction to Tensorflow.

Mentor and Workshop Leader: HackTheMidlands 2018
Led a Python workshop to create web applications using Flask and Redis, which received excellent feedback. Mentored students using all languages throughout the hackathon.

Best Use of AWS: HackUPC 2017 (major international event)
Won *"Best Use of Amazon Web Services"* for designing a real-time panic button system with Amazon Dash buttons, using AWS API Gateway and EC2 instances to persist Socket.IO websocket connections.

British Computing Society (BCS) Committee Member for Birmingham & West Midlands
Multiple key committee responsibilities: proposing budget amendments; finding featured speakers for the BCS' regular monthly events.

IBM Blockchain Essentials
Online course and qualification: "[The holder has] an understanding of Blockchain and distributed ledger systems, the important concepts and key use cases of Blockchain and how assets can be transferred in a Blockchain network."

Hacker Spirit Award: HackTheMidlands 2017
Awarded for helping new attendees experience the hackathon in a positive and productive way, by helping with technical problems during the event, providing programming support to those who needed it, and being an encouraging and friendly face throughout.

Grade 5 (Merit): Dramatic Performance; London Academy of Music and Dramatic Art

Grade 4 (Distinction): Piano; Associated Board of the Royal Schools of Music

Recommendations:

"In the relatively short time at ITV Bede had a profound impact and was pivotal in developing and launching one of ITV Online's key business priorities for the year. Proactive working on his own and collaborative when working in a team Bede was a fantastic asset and above all, a pleasure to work with." *–Mark Tucker, Senior Platform Product Manager at ITV*

"I recently had the pleasure of working with Bede on a short term contract for Vanti. It was clear from the very first day that Bede is a developer who is truly passionate about his craft. He lives and breathes technology and comes to work each day brimming over with new ideas, often sparking great discussions." *–Edan Edison, Technical Lead at Accenture*

"The challenge for this project was to take poorly structured and sometimes incomplete data, with minimal specification and guidance from the client, and convert it into highly structured xml within a strict regulatory deadline. Bede was able to interpret and convert the data, resulting in 100% acceptance rate by the regulator before the deadline. Client was very satisfied with the outcome." *–Ferdinand Peelen, Account Manager at Nex Regulatory Reporting*