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 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 full-stack web development 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, Elm (and conversational 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, PostgreSQL, NumPy/Pandas, ElasticSearch, Consul, Apache Kafka, Django ORM
- **Web**: React, Redux, RxJS, Elm, Flask, Django, REST, RPC, Websockets, SSE, HTTP4s
- **Environment**: Windows, Linux (Ubuntu, Debian, Alpine), MacOS/OSX
- **Testing**: Selenium, Jest, Enzyme, PyTest, Nose, CProfile, Lighthouse
- **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

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 Intern 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; and Zookeeper for Kafka
  - Remote Procedure Calls (RPC) and data serialisation with Apache Thrift

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"*
- 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

Education:

University of Birmingham – B.Sc. Computer Science with Industrial Year (1st class) (2015-2019)
I achieved a first-class degree, including a final year dissertation on Web Audio and related tools.

Other topics included:

- Data Structures & Algorithms
- Advanced Functional Programming
- Computer Systems & Architecture
- Computer Security

- Artificial Intelligence
- Nature Inspired Optimisation
- Intelligent Data Analysis
- Neural Networks

I was also awarded a highly competitive scholarship from the Royal Television Society.

Southend High School for Boys
I was an active and social student, undertaking extracurricular activities like drama, debating and charity work for Fairtrade and YMCA; while also earning multiple additional A-level qualifications.
- A Level: AAA (Physics, Maths and Computing)
- AS Level: AAAA (English Literature; plus extra-curricular Spanish, Philosophy and Ethics)
- GCSE: Ten A* grades
- Active member of the Fairtrade and debating societies

Awards & Responsibilities:

JavaScript Workshops: MLH Local Hack Day and HackTheMidlands 2019
Presented two workshops (with excellent feedback) on React and Web Audio respectively, exploring language features like async/await as well as the fundamentals of Functional Reactive Programming.

Python Workshops: HackTheMidlands 2018 and University of Birmingham C.S. Society
Led a series of Python tutorials for UoB covering intermediate Python language features, web applications and numerical computing. Also ran a Python workshop to create web applications using Flask and Redis. Mentored students using multiple 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 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*